1	STATE OF NEW MEXICO BEFORE THE ENVIRONMENTAL IMPROVEMENT BOARD
2	BELOKE THE ENVIRONMENTAL THEROVERENT BORKE
3	No. EIB 11-01(R)
4	IN THE MATTER OF THE PROPOSED REVISIONS TO THE STATE IMPLEMENTATION PLAN
5	FOR REGIONAL HAZE
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14	TRANSCRIPT OF PROCEEDINGS
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16	BE IT REMEMBERED that on the 1st day of June, 2011,
17	this matter came on for hearing before the Environmental
18	Improvement Board, taken at the State Capitol Building,
19	Room 307, 490 Old Santa Fe Trail, Santa Fe, New Mexico,
20	at the hour of 9:40 a.m.
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23	
24	VOLUME 1
25	

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MS. ORTH: Good morning.

My name is Felicia Orth, the Hearing Officer appointed by the Board to conduct a hearing in EIB 11-01. This is proposed revisions to the State Implementation Plan, which you'll hear referred to as the SIP, for regional haze.

There are a number of parties in this matter, and I'll ask counsel for their appearances in a moment.

The hearing will be conducted in accordance with 20.1.1. These are the Board's rulemaking procedures, as modified somewhat by an order establishing procedures that was entered in March, and slightly modified further pursuant to a teleconference among counsel and the Hearing Officer last week.

Just a few things.

Testimony is taken under oath. It is subject to cross-examination. There are at least two parties who intend to present some of their technical witnesses as a panel.

If you have not submitted prefiled technical testimony, you may offer nontechnical public comment at this time, and we'll talk about nontechnical public comment.

The hearing is being recorded and transcribed by Cheryl Arreguin of Kathy Townsend Court Reporters.

Please contact Cheryl directly if you'd like a copy of the transcript. Eventually it also becomes a public record when received in the office of the administrator and may be reviewed in our offices.

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We expect this hearing to proceed through today in Santa Fe, tomorrow in Farmington. The Board may choose to make a decision at the end of the closure of the record. And we don't know if that will be tomorrow or Friday in Farmington.

So if you have, again, verbal public comment,

I will invite it. If you have written public comment,

you may simply bring it up to the desk, and we'll accept

it up until closure of the record.

Counsel, would you make your appearances.

Mr. Grantham, please start.

MR. GRANTHAM: Good morning, Madam Hearing
Officer.

My name is Bill Grantham. I'm assistant general counsel with the Environment Department. And I'll introduce my witnesses shortly, when we begin testimony.

MS. ORTH: All right. Thank you.

Mr. Alvidrez.

MR. ALVIDREZ: Yes, Madam Hearing Officer, members of the Board.

1 My name is Rick Alvidrez with the Miller 2 Stratvert law firm on behalf of Public Service Company 3 of New Mexico. 4 MS. ORTH: Thank you. 5 Mr. Schlenker-Goodrich. 6 MR. SCHLENKER-GOODRICH: Erik 7 Schlenker-Goodrich, Western Environmental Law Center, 8 representing National Resources Defense Council, San 9 Juan Citizens Alliance and WildEarth Guardians. 10 MS. ORTH: All right. 11 Anyone else here? 12 Sir. 13 MR. ROYBAL: Good morning, Madam Hearing Officer. 14 15 Charles Roybal here for San Juan Coal Company. MS. ORTH: Okay. 16 Anyone else here? 17 18 No. All right. 19 We do have some other parties who were 20 intending to present public comment, and again, let me say for the record what I said to Mr. Crawford in an 21 22 E-mail, in an effort to be forthcoming, not confusing. 23 What I was explaining to Mr. Crawford is that 24 I don't have a printer or a copier here at the roundhouse. 25 The Board does not have available to it

while we're here in this building or at the college in Farmington a printer or a copier.

So I was encouraging Mr. Crawford, and I'll encourage any of the rest of you, yes, we will accept certainly E-mail comment. It's our protocol. However, if you send it now, during the hearing, I don't have an opportunity to print it off for the Board to look at. I simply have an opportunity to forward it to them.

The best way if you want to offer written comment during the -- during the hearing, the best way to assure that it's in their hands before they deliberate is to come with eight copies.

That's what I was trying to explain, and that's -- that's for everyone.

So the order of testimony, which is what we discussed last week, will be the Department here first. And pursuant to the procedural order, their actual narrative testimony came in in written form quite some time ago. What they'll be doing here is just summarizing it and then standing for questions on it.

We'll next hear from PNM.

And we will probably not hear from BHP
Billiton, San Juan Coal Company until we get to
Farmington. The plan is to hear from their witnesses in
Farmington.

- So, Mr. Grantham -- oh. Public comment, before we begin with Mr. Grantham.
- I'd like to have lots of opportunities for

 public comment. We could make an opportunity right now,

 before we hear any of the technical case, for those who

 have come early, to make sure that they have an

 opportunity to offer public comment.
- We could also hear public comment after the
 Department's case, when I would tend to invite it
 anyway, and after the next party's case and after the
 next party's case.
- Does the Board have any input for the Hearing

 Officer on that?
- MS. PEACOCK: I'd like to hear some of the
 testimony before we hear the public comment. I think it
 would fit better for us --
- MS. ORTH: All right.
- 18 MS. PEACOCK: -- and make more sense.
- MS. ORTH: Thank you.
- 20 Mr. Grantham, if you would, please.
- 21 MR. GRANTHAM: Thank you, Madam Hearing
- 22 Officer. Good morning.
- Good morning, Madam Chair, members of the
- 24 Board.
- Again, my name is Bill Grantham. I'm an

attorney with the Environment Department.

And as the Hearing Officer has indicated, the testimony of our witnesses has been prefiled and who are with me today, Rita Bates, the head of the planning section for the Air Quality Bureau, and Mary Uhl, who is now chief of the OSHA Bureau, but until recently was chief of the Air Quality Bureau.

I will have just a few questions for them to supplement their written testimony, and then we'll stand for cross-examination as a panel.

First, I'd just like to provide a little bit of context to the Board to help the Board understand how the Department's testimony corresponds with the regulatory scheme that's provided by the Regional Haze Rule.

As you know from the pleadings, this State Implementation Plan, or SIP, was developed to comply with the requirements of so-called Section 309 of the Regional Haze Rule. That's 40 CFR 51.309.

And Section 309 implements the recommendations of the Grand Canyon Visibility Transport Commission.

It's an option that's available to certain Western states and tribes as a means of complying with the federal regional haze requirements.

And as Ms. Uhl describes in her written

testimony, which is at NMED Exhibit 8a in some detail,
the provisions of Section 309 were developed by the
Western states themselves with extensive stakeholder
input, including industry, environmentalists, federal
land managers and others, to reflect unique Western

conditions.

This Board approved a SIP under Section 309 in December of 2003; however, EPA has never acted upon that SIP submittal.

So one set of SIP revisions at issue in this proceeding are identified as revisions to the Section 309 SIP. And that's to bring those -- that 2003 SIP submittal up to date to current conditions so that EPA can approve it now in -- where we are in 2011.

And those revisions are discussed in Ms. Bates' testimony at NMED Exhibit 9a.

That 2003 SIP addressed only one Class I area in New Mexico, which is the San Pedro Parks, because that was the only Class I area that was included in the Grand Canyon Visibility Transport Commission's analyses.

However, Section 309 has a provision known as Section 309(g) that provides that states may extend the coverage of the 309 SIP to additional Class I areas by making certain demonstrations.

So in the material before you is the so-called

Section 309(g) SIP, which would utilize that mechanism to extend the 309 SIP to the other eight Class I areas in New Mexico.

And as you probably realize, one mandatory element of all regional haze SIPs is the determination of the Best Available Retrofit Technology for certain facilities which were built between 1962 and 1977. The 2003 Section 309 SIP, as with the revisions before you, will satisfy the Best Available Retrofit Technology or BART requirements with respect to sulfur dioxide.

With regard to particulate matter and nitrogen oxide, Section 309(g) requires that -- a determination by New Mexico for the only source in New Mexico that's subject to BART requirements, which is the San Juan Generating Station.

And that determination is discussed in Ms. Uhl's testimony at NMED Exhibit 8c.

And finally, there have been several revisions to the Section 309(g) SIP since the February 28th proposal, specifically in pleadings filed on May -- on April 1st, May 2nd and May 20th. Some of those revisions are to correct errors that the Department discovered on its own, and some are in response to comments from the USEPA and from federal land managers.

And all of the changes are in those three

- 1 pleadings, but for your convenience, we provided you 2 with a consolidated version of that, which is marked as 3 NMED Exhibit 20, and it should be in your package before you, so you don't have to flip between the different --4 5 the different pleadings to review the 309 SIP. And with that, I would like to move to 6 7 examination of the witnesses. 8 MS. ORTH: All right. 9 Swear them, please. 10 RITA BATES and MARY UHL having been first duly sworn or affirmed, were 11 12 examined and testified as follows: 13 DIRECT EXAMINATION 14 BY MR. GRANTHAM: 15 MR. GRANTHAM: Ms. Bates, please state your name for the record. 16
- MS. BATES: Rita Bates.
- 18 MR. GRANTHAM: And where are you employed?
- MS. BATES: I'm employed at the Air Quality
- 20 | Bureau of the Environment Department.
- 21 MR. GRANTHAM: And what is your position
- 22 there?
- MS. BATES: I'm the Planning and Policy
- 24 | Section chief.
- MR. GRANTHAM: And how long have you been in

- 1 | that position?
- MS. BATES: For six years now.
- MR. GRANTHAM: And what is your educational
- 4 | background?
- 5 MS. BATES: I have a bachelor of science
- 6 degree in biology from Humboldt State University.
- 7 MR. GRANTHAM: And what role did you have in
- 8 | the development of the regional haze SIP?
- 9 MS. BATES: I was the lead person for
- 10 developing most parts of the SIP, but it was a group
- 11 project. As you can see, it's a large document.
- 12 MR. GRANTHAM: And did you provide the written
- 13 | testimony that was prefiled and for this notice of
- 14 intent?
- MS. BATES: Yes. And those are Exhibits 9a
- 16 and 9b.
- MR. GRANTHAM: And, Ms. Uhl, if you'll state
- 18 | your name for the record.
- MS. UHL: My name is Mary Uhl.
- 20 MR. GRANTHAM: And where are you employed?
- 21 MS. UHL: I'm employed with the New Mexico
- 22 | Environment Department.
- 23 MR. GRANTHAM: And what is your position with
- 24 | the Department?
- MS. UHL: I am the Occupational Health and

- Safety Bureau chief.
- 2 MR. GRANTHAM: How long have you been in that
- 3 position?

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- 4 MS. UHL: This is my 29th day in that
- 5 position.
- 6 MR. GRANTHAM: What was your previous
- 7 position, and how long were you in that position?
- 8 MS. UHL: I was the Air Quality Bureau chief
- 9 for the New Mexico Environment Department. I was in
- 10 | that position for six years.
- 11 MR. GRANTHAM: And what role did you have in
- 12 | the development of the regional haze SIP?
- MS. UHL: Well, I -- I actually oversaw the
- 14 development of the regional haze SIP, including the 2003
- 15 | SIP that was approved by this Board, but prior to that,
- 16 | starting in the mid '90s, worked on modeling issues for
- 17 | the Grand Canyon Visibility Transport Commission.
- I was the Western Regional Air Partnership
- 19 | Modeling Forum co-chair for a number of years, and that
- 20 | modeling developed the basis for the SIPs that the
- 21 | states have brought forward for regional haze for the
- 22 | federal Regional Haze Rule.
- MR. GRANTHAM: And did you provide written
- 24 | testimony that was prefiled with the notice of intent?
- MS. UHL: I did, and that is Exhibits 8a, 8b

and 8c.

MR. GRANTHAM: Thank you.

Ms. Bates, can you briefly explain the distinction between the -- what has been identified as the 309 SIP revisions and the 309(g) SIP?

MS. BATES: Sure.

Since December, 2003, New Mexico's regional haze plan and regulations approved by the EIB have been enforced by the state, despite EPA's failure to act on the SIP. Had EPA proposed disapproval of the SIP or disapproved the SIP, New Mexico would have been required to propose changes to regulations or face implementation of a federal plan.

After the 2003 SIP was adopted and submitted to EPA, the Washington, DC circuit case in 2005 invalidated that part of the rule governing the backstop trading program. That's the ${\rm SO_2}$ backstop trading program.

EPA finalized rules to address the court decision in October of 2006. Arizona and Oregon then dropped out of the 309 program, and they decided to implement a SIP under Section 308.

40 CFR 51.309, or Section 309, applies to
Class I areas on the Colorado Plateau. New Mexico has
one Class I area on the Colorado Plateau, and that's San

Pedro Parks Wilderness area.

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The EPA indicated to states in the West that the 309 SIPs that were submitted in 2003 were not approvable due to several issues with the voluntary sulfur dioxide emission milestones.

Western states and the City of Albuquerque worked diligently with EPA to negotiate approvable milestones for the program and arrived at an agreement in August of 2010. At that time, Western states began the process of revising regulations and SIPs through individual state processes, as well as the City of Albuquerque as process.

The proposed revisions to the 309 SIP -- now, that's the original SIP that was first approved in 2003 -- are that we revise the SO₂ milestones to levels EPA will accept, we demonstrate that the revised milestones satisfy the Best Available Retrofit Technology requirements for sulfur dioxide, we revise the projections of visibility impairment.

And the revisions explained in more detail -are explained in more detail in my testimony in

Exhibit 9a. It also includes revisions that are shown
in Exhibit 10, submitted with the May 2nd notice of
intent.

There are also additional revisions to 28.2.81

NMAC in response to EPA comments on May 13th. Those are included in Exhibit 14 and were submitted in the May 20th supplemental notice of intent.

The 309(g) SIP includes all remaining Class I areas. There are eight additional Class I areas in New Mexico. This section of the rule allows states to take credit for improvements due to the Section 309 strategies.

In doing so, states must meet core requirements, and that is to set reasonable progress goals, have a calculation of baseline and natural conditions, include long-term strategies to meet those goals, and have a monitoring strategy and meet some other requirements.

The Regional Haze Rule contains numerous specific provisions governing contents of these four core requirements. My testimony at Exhibit 9b provides cross-references to the section of the 309(g) SIP where each element of the rule is satisfied.

There is also a Best Available Retrofit

Technology requirement for nitrogen oxides and

particulate matter, and Mary Uhl will discuss this in

more detail.

In summary, all Class I areas are improving on the 20 percent best days except for Carlsbad Caverns

National Park. We've looked at that, and it appears as if the growth and emissions from New Mexico that were projected to occur by 2018 are causing us not to improve and actually degrade slightly on the 20 best days.

All of the Class I areas in New Mexico are improving on the 20 percent worst days in 2018.

Long-term strategies in the existing 309 SIP, as revised, are sufficient for the other Class I areas.

And I wanted to let you know, as well, that we'll be back before you, because there is another SIP revision due in 2013. This is a program that continues on. So we will be back to this Board many times between now and 2064 to revise the SIP. And I don't think we'll all be here then.

MR. GRANTHAM: Ms. Bates, did the Department receive any comments from federal agencies on any of these SIP revisions after the petition in this matter was filed on February 28?

MS. BATES: Yes. We received comments from the Forest Service, the EPA, the National Park Service and the Fish and Wildlife Service. We also received citizen comments from San Juan Citizens Alliance, and these were submitted to the Board on May 27th by Western Environmental Law Center, as well.

Comments were also posted on our web site.

Our responses to the EPA and Forest Service comments were submitted to the Board on May 20th in our supplemental NOI. We received the National Park Service and Fish and Wildlife Service comments on May 25th, and we have prepared responses to those comments.

We also added the time to meet the natural visibility goal. We already added that. That was one of their comments.

One of their comments was also how did we pick the sources that we looked at for New Mexico for the four-factor analysis.

And the way we did that, we had done a lot of work in the Four Corners region already on oil and gas and power plant emissions. We felt we had a pretty good handle on what those were, and we're continuing to work on those through the Western Regional Air Partnership, but we just were independent in what the three refineries were looking like and how they were affecting Class I areas.

And they also had a question about long-term strategies. We think our long-term strategy does include federal and state programs.

MR. GRANTHAM: And for the Board's information, the responses the Department prepared to the federal land manager's requirements -- excuse me --

- 1 | federal land manager's comments that we just received
- 2 | last week are before you marked as Exhibit 21. And
- 3 | that, along with Exhibit 20, have also been provided to
- 4 other counsel.
- 5 Ms. Uhl, are you familiar with the submissions
- 6 | that Ms. Bates described?
- 7 MS. UHL: Yes.
- 8 MR. GRANTHAM: And did they include any
- 9 comments pertaining to the BART determinations for the
- 10 | San Juan Generating Station?
- MS. UHL: Yes. USEPA's comments point to
- 12 differences in cost effectiveness and control efficiency
- 13 | between New Mexico Environment Department's proposed
- 14 determination and the USEPA proposed determination.
- 15 And the federal land managers believe that the
- 16 | BART determination should be selective catalytic
- 17 | reduction, or SCR, as proposed by USEPA, and not SNCR,
- 18 | as proposed by the Department.
- 19 MR. GRANTHAM: And, Ms. Uhl, can you explain
- 20 | why the Department changed its BART determination
- 21 | between the June 20 -- June, 2010 petition and the
- 22 | petition in this matter?
- MS. UHL: In June of 2010, New Mexico
- 24 | Environment Department proposed selective catalytic
- 25 | reduction, SCR, as Best Available Retrofit Technology

for all four units at the San Juan Generating Station.

Since that time, the Department, working closely with the Public Service Company of New Mexico, has determined that the cost increases to ratepayers in New Mexico for the SCR installation would be overly burdensome. The increase is particularly relevant because 40 percent of PNM's customers in the state are eligible for federal assistance in paying their utility bills.

Federal regulations guiding the BART determination provide discretion to the state to take into consideration all costs of a control technology.

Because of overly burdensome costs to the citizens of New Mexico, New Mexico Environment

Department determined that SCR was not actually economically feasible in this state. SNCR is economically and technically feasible. Therefore, it is New Mexico Environment Department's determination that SNCR is Best Available Retrofit Technology for the San Juan Generating Station.

MR. GRANTHAM: And, Ms. Uhl, why are there differences between NMED's and EPA's cost estimates for the BART determination?

MS. UHL: There are some differences between USEPA's cost estimates for SCR and NMED's accepted cost

estimates for SCR. The cost discrepancies are the direct result of both USEPA and PNM utilizing different costing methodologies in their analysis, which is allowed by USEPA guidelines.

The guidelines allow costs to be based on USEPA's what's called OAQPS Control Cost Manual, as well as on vendor-supplied data. As authorized in the guidelines, PNM estimated costs using vendor data. USEPA, on the other hand, estimated costs solely using the Control Cost Manual.

In practice, however, the costs are likely to be somewhat overestimated or conservative using the vendor data and underestimating using the USEPA Control Cost Manual. Therefore, the actual costs are likely somewhere between the two estimates.

Although PNM's costs may be conservative, the estimates do define the upper bounds of the cost ranges, and the NMED has accepted PNM's cost analysis as a reasonable estimate of the cost of SCR installation at San Juan Generating Station.

Because New Mexico Environment Department accepts PNM's estimate, New Mexico Environment Department rejects USEPA's cost estimate calculations.

MR. GRANTHAM: And for both of you, is there anything in addition you would like to add that I didn't

1 ask about?

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2 MS. UHL: I respectfully request that the 3 Board adopt these plan and rule revisions at the 4 conclusion of this hearing.

The Department also advises the Board that the proposed revisions may be revised to correct any typographical errors we may find and to reflect formatting changes required by The Administrative Law Division of the New Mexico Commission of Public Records for compilation into the New Mexico Administrative Code.

MR. GRANTHAM: Thank you.

Thank you for your attention.

Madam Hearing Officer, that's all the questions we have on direct.

I would like to move for admission of Exhibits 1 through 19 as provided in the notice of intent and supplemental notice of intent and Exhibits 20 and 21 as supplied here this morning.

MS. ORTH: All right.

Are there objections to the admissions of NMED Exhibits 1 through 21?

Counsel?

MR. ALVIDREZ: No objection on behalf of PNM.

MR. SCHLENKER-GOODRICH: No objection.

MS. ORTH: All right. Thank you.

1	They're admitted.
2	(Exhibits NMED 1 through 21 admitted into
3	evidence.)
4	MS. ORTH: Pursuant to our agreement in the
5	teleconference last Tuesday, cross-examination will be
6	conducted in the same order as presentation.
7	So, Mr. Alvidrez, do you have questions of the
8	Department panel?
9	MR. ALVIDREZ: We have no questions.
10	Thank you.
11	MS. ORTH: All right.
12	Mr. Roybal, do you have questions of the
13	Department panel?
14	MR. ROYBAL: No questions.
15	MS. ORTH: Okay.
16	Mr. Schlenker-Goodrich, do you have questions?
17	MR. SCHLENKER-GOODRICH: Just a few questions,
18	please.
19	Should I sit up here?
20	MS. ORTH: That's great.
21	CROSS EXAMINATION
22	BY MR. SCHLENKER-GOODRICH:
23	MR. SCHLENKER-GOODRICH: Good morning.
24	I'm Erik Schlenker-Goodrich with the Western
25	Environmental Law Center, representing NRDC, San Juan

Citizens Alliance and WildEarth Guardians.

I just had a couple quick questions about your -- the cost estimates.

And you indicated that the reason for switching from SCR technology in the 2010 proposal by the Department to SNCR was based on what you viewed as unacceptable ratepayer impacts?

MS. UHL: (Nods head.)

MR. SCHLENKER-GOODRICH: When you did that cost analysis, did you quantify any of the benefits of enhanced visibility protections that would have been afforded by SCR technology?

MS. UHL: No, we did not.

MR. SCHLENKER-GOODRICH: Did you quantify any of the enhanced public health benefits that would be provided by SCR technology versus SNCR technology?

MS. UHL: No, we did not.

MR. SCHLENKER-GOODRICH: Would it be fair to say that the focal point of the cost compliance analysis was simply ratepayer impacts?

MS. UHL: That's correct, the overly burdensome cost to ratepayers.

MR. SCHLENKER-GOODRICH: Was there any balancing done in terms of economic impacts regarding public health or enhanced visibility protections, even

1 qualitative analysis? MS. UHL: No. 2 3 MR. SCHLENKER-GOODRICH: No further questions. MS. ORTH: 4 Thank you, Mr. Schlenker-Goodrich. Mr. Rose, I do see you've joined us since I 5 6 asked for appearances the first time. 7 Do you have questions of the Department panel? 8 MR. ROSE: No questions, Madam Hearing 9 Officer. 10 MS. ORTH: All right. Thank you. 11 Does anyone else have a question of the 12 Department panel based on their testimony? 13 Board members, do you have questions of the 14 Department panel? 15 EXAMINATION 16 BY THE BOARD: 17 MR. CASCIANO: I have a question for 18 Ms. Bates.

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You mentioned that all Class I areas in the 19 20 state had been improving in regard to visibility.

And I wondered if you could quantify that at all or if you had any sort of summary information in terms of some of the terms that are used, like deciviews or -- you know, how would you -- do you have any information beyond saying that the visibility is

- 1 improving?
- 2 MS. BATES: We do have some tables that do
- 3 show how visibility has been improving. Now, if I can
- 4 find those.
- 5 In Section 9.2.1 and in 9 -- in Table 9-1,
- 6 which is in Section 9.2, there is information in here on
- 7 | how visibility --
- MR. CASCIANO: Which exhibit is that?
- 9 MS. BATES: That would be what you just
- 10 received today.
- MR. CASCIANO: 20? Okay.
- MS. BATES: Exhibit 20, I believe.
- And it would be on pages 55 and 56. So it's
- 14 the 309(q) SIP.
- MR. CASCIANO: 55 and --
- MS. BATES: And 50 -- it goes on from 55 for
- 17 | each Class I area through page 63, but the Table 9-1
- 18 summarizes.
- MR. CASCIANO: On page 56?
- MS. BATES: On 55.
- 21 That's projections. But the actual is shown
- 22 \mid in the table -- or the figures, Figure 9-1, 9-2, 3, 4,
- 23 | 5 -- that should be 6 -- oh, 6, 7 and 8.
- 24 If you -- the little --
- MR. CASCIANO: So are you comparing the 2004

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baseline to the 2018 projection or --
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MS. BATES: That's --

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- 3 MR. CASCIANO: I'm just looking for the basis
 4 of your statement that the visibility had been improving
- 5 | in the Class I areas in New Mexico.
- 6 MS. BATES: We project improvement, and we --
- 7 | actually, we do show in these figures for the last --
- 8 from 2005 through 2009, the last four years, if you look
- 9 at the pollutants, they do show in most cases
- 10 improvement. It doesn't show here the actual deciview
- 11 | values for these, but --
- MR. CASCIANO: So those are the line graph --
- MS. BATES: Yes.
- MR. CASCIANO: -- tables?
- MS. BATES: Yes.
- MR. CASCIANO: Okay.
- MS. BATES: And those points are actually
- 18 actual data, monitoring data from 2005 through 2009.
- 19 MR. CASCIANO: Where you see more variation in
- 20 | the lines?
- 21 MS. UHL: If I may, if you look on the next
- 22 page, page 57, and you look at, for instance,
- 23 particulate organic mass, the green line, you do see
- 24 | significant reductions at Bosque del Apache over the
- 25 last five years.

- 1 MS. BATES: Yes.
- 2 MS. UHL: So some pollutants we are seeing
- 3 | improvements, some pollutants we are seeing degradation.
- 4 | It really depends on the pollutant. So --
- 5 But the program is rather young. This is a
- 6 program that extends through the year 2064. So the
- 7 | state has a lot of time to show improvements in
- 8 visibility as the program proceeds.
- 9 MR. CASCIANO: Thank you.
- 10 MS. BATES: And Table 9-1 shows that we
- 11 project improvement on the worst days in all areas for
- 12 2018.
- MR. CASCIANO: Based on these --
- 14 MS. UHL: That's based on -- no. That is
- 15 | based on modeling of all controls that will take place
- 16 | throughout the West, controls we expect to be enacted,
- 17 federal, state controls.
- MR. CASCIANO: So it doesn't differentiate
- 19 between the future controls for the San Juan Generating
- 20 | Station or --
- 21 MS. UHL: It doesn't go into that kind of
- 22 detail. No.
- MS. BATES: This includes controls in other
- 24 | states, as well. So it's the projection of all the
- 25 | Western states and -- and also Eastern states, because

- 1 they also impact visibility in Class I areas. This is a 2 regional program. So these projections include not just 3 the region, but also outside of the region, including 4 emissions from Mexico, Pacific offshore, things like 5 that. 6 MR. CASCIANO: Okay. 7 Thank you. That clarifies. 8 MS. ORTH: Other Board questions? MR. VOLKERDING: I've got a couple, and they 9 10 bounce around, so I apologize.
- The first one kind of follows up on

 Mr. Casciano's.
- I had noticed in Exhibit 2 that the EPA -- is
 that EPA is proposing to disapprove the New Mexico SIP,
 da-da-da-da, because of the good neighbor requirements.
 - So I was just curious -- that's out of the Federal Register. How -- what about the other states? I mean, have all the surrounding states had their SIPs approved by EPA, that you know of?
- MS. UHL: No.

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- MR. VOLKERDING: No?
- MS. UHL: In fact, that is not the case.
- MR. VOLKERDING: Okay.
- MS. UHL: Only some states are -- were named in this litigation.

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              MR. VOLKERDING: Okay. I see. All right.
2
              And do you happen to know the status of the
3
    Federal Implementation Plan for the Navajo tribe?
 4
              MS. UHL: On -- on regional haze?
 5
              MR. GRANTHAM: Four Corners.
 6
              MR. VOLKERDING: Yeah, for Four Corners.
7
              MS. UHL: For Four Corners, the BART?
              MR. VOLKERDING:
8
                               Yeah.
9
              MS. UHL: It's still in -- it's still in
10
    proposal.
11
              MR. VOLKERDING:
                              Okay.
12
              MS. UHL: There has not been a final yet.
              MR. VOLKERDING:
13
                               Okay.
              MS. PEACOCK: With your question, there were
14
15
    how many states, four or five states, in the consent
    decree? Have any of those had SIPs approved?
16
              MS. UHL: I know that Colorado has submitted
17
    their SIP. I don't know that it's been approved yet.
18
19
              MS. BATES: I don't know either. I -- EPA has
    a longer timeline to approve than we have to submit, it
20
    feels like sometimes.
21
22
              MR. VOLKERDING: And this may be a better
23
    question for PNM, but I'll start with you.
24
              Looking through a lot of the technical
25
    documents, there was a debate between EPA and NMED and
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- PNM on the fuel at the San Juan Generating Station,
 whether it was considered bituminous or subbituminous.
- And I just -- was that ever resolved? I mean,

 was there ever an agreement, or --
- 5 MS. UHL: The Department determined that it 6 was a subbituminous --
- 7 MR. VOLKERDING: Okay.
- 8 MS. UHL: -- classification, and that -- that 9 is how the BART determination has proceeded.
- MR. VOLKERDING: Okay. That's what it looked
 like, but I guess I never -- there was a lot to read, so
 I apologize if that was --
- MS. UHL: Right.
- MR. VOLKERDING: Okay.
- And then in terms of accepting PNM's cost, is
 there -- you know, it is to their advantage to propose
 as high a cost as possible.
- So is there any backstop or any follow-up once all of the work is done to show that they were close, or how does that work?
- MS. UHL: There is no provision of the federal rule that requires --
- MR. VOLKERDING: Okay.
- MS. UHL: -- a follow-up at the end to
 determine the costs. All the -- all the cost estimates

are done prior to installation.

2 MR. VOLKERDING: Okay.

MS. UHL: It could be useful information for the future, of course, but once the controls are in place, there wouldn't be some -- if you're -- if your question is would at some point PNM have to take the controls off and put on different controls --

MR. VOLKERDING: Yeah. I don't know what exactly -- I don't know what the ramification would be. I was just kind of curious.

MS. UHL: Yeah.

MR. VOLKERDING: Okay.

And then there was a section -- Section 8.4 of the SIP, and this is just a confusing statement. It says that area emissions growth was based on EPA model that was subsequently withdrawn by EPA.

MS. BATES: Yes.

MR. VOLKERDING: Why was it withdrawn, and then -- but we're still relying on that -- the model. So I just kind of wanted to hear a little bit about that.

MS. BATES: Yes. Unfortunately, the timing was such that by the time this was done -- and remember this wasn't just done for New Mexico. This was done for all Western states by the Western Regional Air

Partnership through a contract with the contractor at probably a very high cost.

By the time it was done, then EPA withdrew the model. So it was kind of too late. And the EPA determined that it really overpredicted. So we wanted to make it clear that the area source growth is likely overpredicted. And you will notice in some of the bar charts, it really shows those area sources growing over time.

Also, as you're all aware, you know, in the last few years, we haven't had the kind of growth that we might have expected six years ago. So models are only good for, you know, the time that you're using them, the data that you have. They change over time. And that is one that did change.

MS. UHL: However, since we are projecting improvement on the worst days with this conservative estimate -- overestimate of area source growth --

MR. VOLKERDING: Okay.

MS. UHL: -- it only adds conservatism to our analysis. So it isn't as if we are going to have to redo this because of the area source modeling or anything like that.

MR. VOLKERDING: Okay. That's all I had.

MR. BRYCE: I have one question.

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1
              In your source analysis and your modeling, did
2
    NMED use any baselines that were in excess of the
3
    minimum EPA requirements, or what the SIP plan would be
4
    requiring?
5
                        I believe you're asking did the
              MS. UHL:
6
    Department make assumptions about rules that might not
7
    be required by federal regulations? Is that where
8
    you're -- in our baseline?
9
              MR. BRYCE: In your baselines, yeah.
10
              MS. UHL: Right.
11
                         What were your baselines, and did
              MR. BRYCE:
12
    they result in any working SIP that is -- goes -- brings
13
    New Mexico beyond what the federal standards would be?
14
              MS. UHL: The simple answer is no.
15
    baselines simply took into account federal and state
16
    rules that were already in place.
17
              MR. BRYCE:
                         Okay. Thank you.
              MS. PEACOCK: I have a question back to the
18
19
    consent decree.
20
              Did the judge approve that extension to
21
    August?
22
                             He did, yes.
              MR. GRANTHAM:
23
              MS. UHL:
                        (Nods head.)
24
              MS. ORTH: Other Board questions?
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              MR. FULFER: Did the EPA cost analysis -- did
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1
    it include costs associated with building the building
    on an existing site versus like this going out and
2
3
    building new? Did they base their cost on going and
    retrofitting an existing site?
 4
              MS. UHL: We -- that's the USEPA cost
 5
 6
    estimate, and we did not conduct a rigorous engineering
7
    analysis of EPA's cost estimate. So we can't comment on
    that.
8
9
              MR. CASCIANO: Did your cost analysis contain
10
    the operational cost? I know you had a capital cost,
    but are there operational costs that are also --
11
12
              MS. UHL: Yes.
                              Those are included in the --
13
              MS. ORTH:
                        Other Board questions?
14
              Or are you -- you're looking for the answer.
15
              MS. UHL: Do you want me to tell you where
    that is in the --
16
17
              MR. CASCIANO: Sure.
              MS. UHL: -- in the submittal?
18
19
              Let me find it.
20
              MR. BRYCE: We've got one copy of -- I'm not
    sure if that's in Exhibit 7d.
21
22
                       In Appendix D, Table 11 -- Tables 10
              MS. UHL:
23
    and 11, includes the -- it's the impact analysis and
24
    cost effectiveness of additional NO, control technologies
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and additional particulate matter control technologies

- in that table in the total annualized costs.
- 2 MR. CASCIANO: So it included both?
- MS. UHL: Yes.
- 4 MR. CASCIANO: And does EPA have any guidance
- 5 | for how you evaluate cost?
- 6 MS. UHL: Yes. USEPA has the Control Cost
- 7 Manual. But that manual also allows you to use vendor
- 8 data.

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- 9 MR. CASCIANO: Yeah. I understood that it
- 10 | allows you to consider cost, but I didn't understand the
- 11 | criteria whether there were specific goals where -- you
- 12 | know, above a certain dollar amount per ton of pollutant
- 13 was acceptable, and if it was less, then a certain
- 14 dollar amount per ton of control was not acceptable.
- MS. UHL: Oh, I see, Board Member Casciano. I
- 16 understand your question, I believe, to be what is the
- 17 | cutoff of what's a reasonable cost per ton of pollutant
- 18 removed, and --
- MR. CASCIANO: Correct.
- 20 MS. UHL: -- and there is no bright line on
- 21 that.
- MR. CASCIANO: This is what my
- 23 understanding --
- 24 MS. UHL: It's at the discretion of the state
- 25 or at the discretion of whoever is making the

determination.

2.4

2 You can use historical data --

MR. CASCIANO: Right.

4 MS. UHL: -- to look at what's been accepted,

5 | but there is no bright line.

MR. CASCIANO: Thank you.

MS. ORTH: Other Board questions?

MR. FULFER: Do you feel that the -- I know you looked at several technologies on this, but how do you feel the technology is, how is it catching up with coal, and how -- I guess the question is is technology catching up and becoming feasible for implementation in clean coal?

MS. UHL: Board Member Fulfer, there's certainly a lot of research being done into improving control technologies for coal-fired power plants, and that is a continuous work.

Certainly what we have before us, the range of options that were reviewed in this BART determination is very robust. There is -- there is a lot to choose from here. And I do believe that technology will continue to evolve over time. But at this time, the technologies are very good for improving -- or for reducing emissions from coal-fired power plants.

MS. ORTH: Other Board questions?

Mr. Grantham, do you have any follow-up? 1 2 MR. GRANTHAM: Just a couple, Madam Hearing Officer. 3 4 REDIRECT EXAMINATION 5 MR. GRANTHAM: And either of you can answer 6 this, if you can. 7 Does the guidelines for the BART determination, Appendix Y of Part 51 -- does it require 8 consideration or quantification of benefits as part of 9 10 the BART determination? 11 MS. UHL: Can you clarify what kind of --12 MR. GRANTHAM: Benefits such as the economic 13 value of visibility improving or health values of --14 that are a side effect of the visibility improvement. 15 MS. UHL: No, it does not. 16 MR. GRANTHAM: It does not require that? 17 MS. UHL: It does not require that. MR. GRANTHAM: Does it allow for that or 18 19 specifically mention that? 20 MS. UHL: I don't believe it mentions that. 21 No. 22 MR. GRANTHAM: Thank you. 23 And regarding the -- the question about cost 24 cutoffs or what is a reasonable cost, if you're able,

can you -- can you give a range of the costs that

25

- underlie the technologies that EPA was looking at as presumptive standards for BART, presumptive emission limits for BART?
- MS. UHL: I think I can give a general range on that.
- As far as getting to presumptive limits,

 plants in the US that have looked at meeting presumptive

 limits, the costs might be anywhere from \$800 per ton

 removed to about \$2,000, \$3,000 ton -- per ton removed.

 But that's certainly just a ballpark. It's not a hard

 and fast number. But generally that's the range that

 I've seen from the BART determinations I've looked at.
- MR. GRANTHAM: Okay. Thank you.
- No more questions.
- MS. ORTH: All right. Thank you very much.
- 16 Is there any reason not to excuse the
- 17 | Department panel?
- 18 Hearing none, thank you very much.
- Let's turn now -- if the Board would like a

 break, this is a good time, or we can turn to accepting

 public comment.
- MS. PEACOCK: Let's do -- does anybody need a
- Public is fine.

23

break?

MS. ORTH: We're all right?

All right. We're going to turn now from the technical case to accept some public comment.

I have the first four sign-in sheets. I will call you in the order in which you signed in if you indicated that you'd like to give public comment.

Please sign in if you haven't done so. No salesmen will call. We use the sign-in sheets as evidence of public participation and for the correct spelling of your name for the -- for the transcript.

You can change your mind. If you indicated that you didn't want to make public comment and now you do, that's fine. If you said that you did and now you didn't, that's fine, as well.

And as I said, you are certainly welcome to submit your public comment in writing.

Comment is taken under oath, and the Board may have questions of you.

Because we have not hordes of people, I will not pull out my stopwatch with the three-minute timer.

I will ask you to keep your comments under five minutes.

There are a couple dozen folks who want to speak.

So Carla Sonntag.

MS. SONNTAG: I have written comments, too.

Should I give them to you?

MS. ORTH: Yes, please.

1 Thank you.

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MS. SONNTAG: Thank you.

CARLA SONNTAG

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT TESTIMONY

THE REPORTER: Would you state and spell your full name, please.

9 MS. SONNTAG: Yes. Carla Sonntag, C-A-R-L-A
10 S-O-N-N-T-A-G.

11 THE REPORTER: Thank you.

MS. SONNTAG: Good morning.

My name is Carla Sonntag. I'm the executive
director of the New Mexico Utility Shareholders
Alliance.

And I'm here to talk to you today about Case Number EIB 11-01, the regional haze proposal at San Juan.

The New Mexico Utility Shareholders Alliance represents about 7,000 people, shareholders of gas and electric utility companies operating in the state. The vast majority of those are PNM shareholders. But something that's important to keep in mind, they're also ratepayers. And I am here today to urge you to please adopt the State Implementation Plan as proposed by the

New Mexico Environmental Department.

2.4

NMUSA supports clean air and good visibility, but much has already been accomplished at this plant in regards to both of those initiatives. PNM spent \$320 million in 2009 on environmental upgrades to reduce pollutants and improve visibility in the region.

In combination with what's being proposed with the SCNR, we believe that you're going to have -- I'm sorry -- the SNCR technology at the plant, it will address the cost effectiveness requirements of the federal regulations with respect to haze reduction and technology costs.

It's going to further improve visibility. It will lower NO_{x} emissions by 4,900 tons per year. This would be a total of 54 percent reduction of NO_{x} when combined with the 2009 upgrade.

The state plan will also reduce the cost of required upgrades significantly from the federal proposal for the selective catalytic reduction technology.

An internal survey of our members showed that the vast majority are retirees on a fixed income. Over 72 percent are 65 years or older, and 47 percent of them have an annual income of less than \$50,000.

Our members support the state's plan because

- 1 it provides balance between minimizing costs and
 2 protecting the environment.
- I want to thank you for your consideration,

 and I hope you'll give serious consideration to all the

 elements of the two proposals, and keep in mind the

 impact on ratepayers in the third poorest state in the

 nation.
- 8 Thank you.
- 9 MS. ORTH: Thank you, Ms. Sonntag.
- Board, I'm not going to invite questions every
 time. If you would, if you have a question, please
 speak up.
- 13 James and Donna Crawford.
- 14 JAMES CRAWFORD
- having been first duly sworn or affirmed, was examined and testified as follows:
- 17 DIRECT TESTIMONY
- THE REPORTER: Would you state and spell your
- 19 full name.
- 20 MR. CRAWFORD: James Crawford, J-A-M-E-S
- 21 C-R-A-W-F-O-R-D.
- 22 THE REPORTER: Thank you.
- MR. CRAWFORD: Madam Chairman and EIB Board
- 24 | members, I'm willing to take the blame from Felicia, but
- 25 | I wasn't the one -- I wasn't the one you wrote to, so --

anyway, just to make that straight.

I'm James Crawford, I'm from Los Lunas, New

Mexico. And I'm just an interested citizen representing

myself.

I, in fact, read the hundreds of pages of material in this case that contained enough charts, tables, graphs and impressive mathematical formulas to make one's head spin.

It really is a dazzling display of pseudoscience, but when one cuts through all of the mush, the question is is there any logical common sense result? And I'd have to say I think not.

This hearing is about visibility. This is a visibility rule, haze rule, in Class I federal wilderness and national park areas.

So how is visibility measured? Visibility is measured with a deciview, one deciview representing the change in visibility that's perceptible to the human eye. More deciviews mean more haze. There's probably a hundred of them over Santa Fe this morning. Zero deciviews mean no haze.

So if the deciviews change is less than 1, who cares? No one can tell the difference.

Now, the only action item being considered in this plan is which technology is going to be mandated

for the San Juan Generating Station.

You know, the owners of San Juan have spent millions, about \$320 million on already cleaning up the air. Now they're being asked to spend as much as a billion dollars more. This additional obscene amount of money is being spent to achieve no noticeable change in visibility. The benefit/cost ratio for this project is zero.

Other than paying my bill to PNM each month, I have no allegiance to the owners of San Juan. However, I do resent them spending millions of dollars that would be passed on to us ratepayers for zero benefit.

Analysis of the economic effects of this proposal are virtually nonexistent. Please remember that this plan is about visibility only. EPA -- EIB is being used as a pawn in an overt fight to close San Juan Generating Station.

You're going to hear from a number of sources throughout this hearing that openly advocate for closing San Juan. You're going to hear rants about things from disease epidemics to global warming as justifications for ever increasing and ever more expensive restrictions on San Juan just to bring it to its knees.

These arguments are unrelated to visibility.

You must stay focused on whether the massive investments

yield any perceptible improvement in visibility.

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2 Unfortunately, you're being presented with a 3 no win situation. NMED has proposed a plan costing over 4 \$77 million to achieve less than one-fourth of one 5 perceptible unit of improvement in visibility. 6 being blackmailed to approve the proposed plan. 7 don't approve the NMED plan, a worse plan preferred by 8 USEPA is the only alternative, costing as much as a billion dollars. 9

Choosing the least damaging of two unreasonable and ineffective alternatives is insane. A competent analysis should include all reasonable alternatives, including not taking any action at all.

Will visibility change if the proposed action is not implemented? The answer is a definite no. There will be no perceptible change in visibility. But there will be a perceptible change in everyone's electric bills.

Thank you very much. That's kind of my summary. I have more detail that I submitted in writing, and I can give a written -- maybe you already have mine.

MS. ORTH: (Shakes head.)

MR. CRAWFORD: No?

I don't have eight.

This

1 MS. ORTH: Thank you so much. 2 Judith Williams. 3 MS. WILLIAMS: Madam Chair --4 THE REPORTER: Would you raise your right 5 hand, please. 6 JUDY WILLIAMS 7 having been first duly sworn or affirmed, was examined and testified as follows: 8 9 DIRECT TESTIMONY 10 THE REPORTER: Would you please state and spell your full name. 11 12 MS. WILLIAMS: Judy Williams, J-U-D-Y 13 W-I-L-L-I-A-M-S. 14 THE REPORTER: Thank you. 15 MS. WILLIAMS: I represent the League of Women Voters of New Mexico. 16 17 Thank you for this opportunity to speak to you 18 today. 19 We already submitted a letter in writing. 20 have, unfortunately, only two extra copies. But if any 21 of you are interested in having it passed around, I'd 22 love to have you read it, and I hope you will later. 23 The League of Women Voters of the United States advocated for the Clean Air Act and has been 24 pressing for its full implementation ever since. 25

advocacy included strengthening air pollution controls on government and industry, notwithstanding the higher prices and taxes that might result.

The EIB is required by law to consider the human and environmental health impacts, the public interest, including social and economic factors, beyond the narrow interests of the power company, and make a thorough and objective analysis of the costs and effectiveness of its proposals.

This has not been done.

The League of Women Voters of New Mexico understands that the Department's recommendation in 2010 included the selective catalytic reduction, or SCR, technology consistent with EPA's proposed Federal Implementation Plan, but it is not -- the Department is now reverse course and supports a technology which will result in a significant increase in nitrous -- nitrogen oxide emissions over the SCR.

The League is troubled by the Department's about-face in this matter, raising significant concerns about whether the Department is adequately considering the public's interest in the promulgation of the revised haze rule.

Without a compelling explanation of why the SNCR technology is in the public interest, the League of

Women Voters of New Mexico urges the EIB to reject the
Department's proposed revisions to the haze rule. The
League supports the SCR technology and urges the EIB and
the Department to disregard the self-serving cost
estimates provided by the industry.

New Mexicans deserve a complete explanation from the Department about why its newfound support for the SNCR is in the public's interest.

Thank you.

MS. ORTH: Thank you, Ms. Williams.

Lisa Law.

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12 LISA LAW

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT TESTIMONY

THE REPORTER: Would you state and spell your full name.

MS. LAW: Lisa, L-I-S-A, Law, L-A-W.

Board members and people in the audience, I lived here 44 years, and I've watched what's happened to our air and our -- a lot what's happened in Los Alamos, and of the promises that we were made to keep our state clean.

I'm looking for our state to be an example for other states. At this point at Los Alamos, we are now

about to have more triggers built for atomic bombs, \$400 million, I think, at the facility. This is after we were promised to reduce nuclear triggers.

I think that we should take the money that is spent at Los Alamos and develop proper solar and wind generation for our energy and stop using coal, which is dirty. This about cleaning up the air, visibility, it's all a bunch of cover-up. I think we have to use our money, the taxpayers' money, to properly develop solar and wind energy.

I am -- I have a house in Embudo, which is totally off the grid. I provide enough energy to facilitate the ranch, and I have for the last 16 years.

So I think, as Mr. Crawford said, you're going to hear from a lot of people. I liked what he had to say, that we should use our money and stop using coal altogether, which is dirty.

Also, you have to get coal through strip-mining. We've watched what's happened to the Indians when they strip-mined at Big Mountain. We relocated over 10,000 Indians and wrecked their lives. They became alcoholics. The elders died. The Indians are not being thought about when it comes to coal.

So I think we should get rid of coal totally and develop -- because we have a lot of sun, we have a

lot of wind, as you noticed this month and last month and the month before, that we can provide enough energy for this state and be an example for other states of how we can have clean energy from now on in the future.

Thank you.

MS. ORTH: Thank you, Ms. Law.

Bruce Madden.

BRUCE MADDEN

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT TESTIMONY

THE REPORTER: Would you state and spell your full name.

MR. MADDEN: Bruce, B-R-U-C-E, Madden,

M-A-D-D-E-N.

16 THE REPORTER: Thank you.

MR. MADDEN: I first moved to this state in 1969, and one of the first things I did was go to the Sandia Peak. And I was awestruck at the pristine quality of the air, at the views from the Magdalenas up to the San Juans. Fell in love, been here ever since.

That's not there anymore. I go there often.

That's long gone. So we're passed that. Maybe my

grandkids will have that view again some day, but not if

we continue to misunderstand costs.

We're talking -- I heard reference to visibility as being the issue. Well, the visibility problem is created by particles that are made up of various substances. And those particles are just clearly not good for humans to breathe. So if you want to discuss business climate, you might want to first start by discussing the human climate.

I did hear that no health considerations were made when estimating the costs involved in choosing the various technologies. That's patently foolish. The Four Corners Generating Station is, I believe, about the 12th worst in the country for mercury production.

When I hear costs, I also hear nothing about jobs and revenue streams. Now, if there is cost to make improvements, that's not throwing bagful of money into the -- into the boiler and burning it up. That's contractors, that's engineers, that's all kinds of technicians.

And by the way, I'm a retired computer engineer.

Mercury is clearly a poison. We all know it.

There are people building pumps and all kinds of equipment across the country that can use those jobs. Those people pay taxes. Those revenues will come into the state. So I doubt that those benefits, the benefits

of the jobs, have been considered either.

I've heard mention of technology and emerging technologies and improvements in technology. Well, I am all for developing technologies and have been involved in all kinds of technology developments, but technology is not useful unless it is implemented. And you folks are the folks that make the decisions to implement technologies that are available.

And those benefits flow to not only people in this state, but people across the country, and people across the country do need those jobs. And if we lead in these areas, rather than race to the bottom with some of the other states, we will reap those benefits in the long run. And when I think of my daughters, that's what I'm thinking, in the long run.

A few weeks ago, I drove my daughter back from graduating from college, and we crossed the Mojave Desert. There's an enormous facility that's built out there, and it's almost done, and it's built in under four years, and it will generate as much power as a very large coal plant, except that the source of that energy are photons from the sun, and it is also a cost-effective plant.

Why aren't we starting to think in those directions? Maybe keep what we have as long as we need

1 it, and keep it as clean as we can, but think ahead, not 2 just to a year out, two years out. 3 I think that's pretty much what I have to say. Thank you. 4 Thank you, Mr. Madden. 5 MS. ORTH: 6 Ellen Caldwell. 7 Marlene Perrotte. MARLENE PERROTTE 8 9 having been first duly sworn or affirmed, was 10 examined and testified as follows: DIRECT TESTIMONY 11 12 THE REPORTER: Would you state and spell your 13 full name, please. 14 MS. PERROTTE: Marlene, M-A-R-L-E-N-E, 15 Perrotte, P-as-in-Peter-E-R-R-O-T-T-E. 16 THE REPORTER: Thank you. 17 MS. PERROTTE: You're welcome. 18 Good morning. 19 These are ominous times. And our planet today 20 is speaking loud and clear to all of us about our air, 21 our water and our soil, the very existence of our 22 planet. 23 And I come here as a sister of mercy, living 24 and working in Albuquerque, New Mexico. I testify on 25 behalf of all the children who celebrate today and for

all who will be born, for they are beloved children of God and deserve clean air, clean water and a strong healthy community that looks to the future, not to the past, not to agreed, not to money for stockholders.

I'm here because burning coal is a moral issue. The Four Corners Power Plant is one of the nation's dirtiest. Coal is a dirty and dangerous fuel source, and burning coal is in direct conflict with religious values of stewardship, sustainability, justice and respect for life.

The carbon emissions, the toxic mercury and haze generated by burning coal all have far-reaching health effects. At some moment, we must say no to dirty coal-fired plants and the problems they are creating for health, the environment and climate change, especially for our brothers and sisters throughout the planet who are suffering extreme droughts. And that is here in New Mexico. People suffering from the floods and the disruption of food production.

Coal-fired plants are a major part of the endangerment of the life support systems for all that God created for all people. It is the poor and often indigenous people who have contributed least to this problem, who will suffer the most.

Inaction cannot be an option. Money spent to

extend the life of the remaining two units of this power plant might be used better to move toward a clean energy future. We must transition to clean energy sources that support life. As we transition to clean energy, we must work to remediate and restore the land and communities that have been degraded and economically exploited from coal mining.

We support programs to provide job training, to displace coal workers and restoration of degraded lands. Each of us needs to speak truth even though it is not accepted within the current reality. Today our world is in need of a radical change, and a transition to clean energy is part of this change.

Now, I went to the hearing in Farmington, and the EPA had a slide presentation, and there was a map that showed the extension of the pollution. I could not get that map, but I do refer you to this map. It was the slide presentation that was given, the overview of EPA proposals for Four Corners Power Plant.

And it was just the San Juan. And I think if you could superimpose, the -- the radius goes all the way through Albuquerque, et cetera, from Farmington -- I mean from the Four Corners.

So please, do not compromise our future. We look to you to protect us from the public sovereignty of

1 our resources. We must stop and put -- and challenge us 2 to the highest level, not to the most compromising, base level. Greed cannot be the element that drives this 3 4 decision. Hold us to the highest level of technology 5 that's possible. 6 Thank you. 7 MS. ORTH: Thank you, Ms. Perrotte. Joan Brown. 8 JOAN BROWN 9 10 having been first duly sworn or affirmed, was examined and testified as follows: 11 DIRECT TESTIMONY 12 13 THE REPORTER: Would you please state and 14 spell your full name. 15 MS. BROWN: Sister Joan Brown, J-O-A-N B-R-O-W-N. 16 17 THE REPORTER: Thank you. 18 MS. BROWN: Good morning. 19 And thank you for hearing our comments as 20 public concerned citizens. 21 My name is Sister Joan Brown. I'm a 22 Franciscan, and I'm the executive director of New Mexico 23 InterFaith Power and Light, an organization of faith

care, specifically concerned with climate change and how

communities all across the state that work on creation

24

25

that affects us in New Mexico and our brothers and sisters throughout the planet. We see this as a moral, ethical and a spiritual concern.

The whole issue of haze we're addressing today really, I think, is a superficial indicator of other grave concerns of pollution and of emissions that are causing many other things. So I think that we need to address this on a deeper level.

Yesterday in Albuquerque Journal, in A Diary on the Planet, there was a little piece I thought was interesting, and it stated that the dramatic swings between very wet, very dry and catastrophically stormy weather are likely to be the norm from now on, according to scientists who point to an overall warmer global climate as the source of new meteorological reality.

And this is a quote. "It is a new normal, and I really do think that global weirding is the best way to describe what -- what we're seeing."

Now, you might think this is from somebody off the charts, but it was not. It was a climate scientist, Katherine Hayhoe, from Texas Tech University, not from someplace in the East Coast or the West Coast. She was meeting with business people who were quite concerned about this issue, and they were trying to see how they could address the implications of all of this pollution

and what it was causing with the climate and weather patterns.

So this is a localized issue, but it's also an international issue. And as a member at -- and the member and partner faith communities of New Mexico
InterFaith Power and Light believe that the current technology of burning coal to produce electricity carries huge societal costs around air and water pollution and is one of the most significant drivers of climate disruption. These external costs are not captured in the price of coal power.

Every step of the current coal-fired process is dangerous to human health, from mining and processing to burning and storage of the waste ash. And those most often impacted by these dangerous processes are the most vulnerable members of our communities, the poor, the elderly and the children.

And I think it's interesting to note that
Washington State, with the help of the InterFaith Power
Light businesses and other organizations, just closed a
coal-fired power plant through their legislative
process. We at NMIPL support strong standards to reduce
the emission from coal-fired power plants because it's a
matter of health, haze, health, and the long-term future
of the planet.

The proposed 2010 EPA implementation of safeguards to reduce pollution by 80 percent was supported by New Mexico Environmental Department in 2010, and we at NMIPL are rather dismayed that NMED is considering weakening these safeguards at the San Juan Generating Station from that 80 percent reduction to a 20 percent reduction.

As faith leaders devoted to the common good, we are opposed to this change and do not understand the justification for it. Some might argue that implementing the original goals would be too costly, but pollution is already exacting an enormous cost from the people of our state and our brothers and sisters everywhere, in terms of health and quality of life.

Our faith communities provide support to the economically poor through our food pantries, with energy assistance, emergency assistance, and we will continue to be those people out there aiding and walking with our brothers and sisters.

But we have a moral responsibility to protect the air that has been given to us by the creator and to safeguard the present and the future health of infants and children and the value which we cannot calculate in dollars and cents.

The Pontifical Academy of Sciences, appointed

by Pope Benedict of the Vatican, recently published a
report in which they said, "We appeal to all nations to
develop and implement, without delay, effective and fair
policies to reduce the causes and impacts of climate
change on communities and ecosystems, including mountain
glaciers and their watersheds, aware that we all live in
the same home."

The report further said, "We are committed to ensuring that all inhabitants of this planet receive their daily bread, fresh air to breathe and clean water to drink as we are aware of that, we want justice and peace, and we must protect the habitat that sustains us." End of quote, from the Pontifical Academy of Sciences of the Vatican.

So in conclusion, we are people of hope. We believe in life, and we believe that we need to protect life, from conception until death. And we recognize that the transition to clean energy is complex and requires financial investments, but we have great faith in the ingenuity and leadership and moral integrity of our government leaders and business executives and the citizens of New Mexico.

If we spent funds on renewables, the costs would decrease. In one way or another, we are going to have to spend money to get ourselves out of the

situation that we're in. We believe that we can come
together despite the challenges to move towards a clean
energy economy and a healthy future for our children and
our grandchildren, and it is a moral, ethical and a
justice imperative.

And I will submit to you all electronically a letter that's being signed by faith leaders throughout the state, which include Episcopal Bishop Vaughan,
Reverend Donna McNiel who is the director of New Mexico
Conference of Churches, the New Mexico InterFaith Power and Light board and directors, Reverend Holly Beaumont who is the organizing director for Interfaith Worker
Justice, and numerous pastors who are Catholic,
Mennonite, Presbyterian, Methodists and others
throughout the state.

So I thank you for your attention this day.

MS. ORTH: Thank you, Ms. Brown.

Juan Reynosa.

JUAN REYNOSA

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT TESTIMONY

THE REPORTER: Would you please state and spell your full name.

MR. REYNOSA: Juan Reynosa, J-U-A-N

R-E-Y-N-O-S-A.

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THE REPORTER: Thank you.

MR. REYNOSA: Hello, all.

Thank you all for giving me this chance to come up here and give a comment today. I've been working a lot on this issue, so I appreciate the time today.

My name is Juan Reynosa, and I'm an organizer with the Sierra Club here in New Mexico based out of Albuquerque. I've been heavily involved within the EPA regional haze process that's been going on for both San Juan Generating Station, as well as Four Corners Power Plant more recently.

During this time, being a part of these hearings, I saw numerous people commenting on the effects of haze in the region, many people who have lived there for decades commenting about the thick, yellow smoke that goes along the San Juan River and how that has affected people for generations. Many people have noticed impacts to this.

Many people talked about the impacts upon the tourism department, which, as you know, New Mexico is a very rural state, with a lot of beautiful, natural landscape, so we definitely rely heavily on this as a revenue stream within New Mexico. So that is definitely

one thing to consider as we look at these Class I areas that are affected by the haze from San Juan Generating Station.

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And to reference what Marlene was talking about with the map of the regional haze areas that were affected, that map showed 16 Class I areas. And I will also note that one of my Navajo Coalition partners noticed that there are also six Navajo-designated environmental areas within that radius that are also affected that hadn't been noted.

So yes, it does affect people through the haze, but I also saw many testimonies from grandparents talking about their grandchildren, waking up in the middle of the night with asthma attacks, to also young teenagers talking about growing up and seeing how many of their friends in Farmington have contracted asthma.

So while many will say this is only about regional haze, there have definitely been scientific links between the ground level smog, which is caused by NO_{x} emissions, and the health impacts on that. So I would definitely like to note that, that many people in the area have noted that during the hearings, and you could reference those notes to see many of those testimonies.

As a Sierra Club representative, we would like

to see the best available technology installed on the San Juan Generating Station to decrease emissions of nitrogen oxides. We feel this technology is selective catalytic reduction and not the selective noncatalytic reduction that the state and PNM are proposing.

We think that with this EPA proposal, that we are starting to realize the true cost of coal. San Juan Generating Station had one retrofit in 2009, but before that, they had not had any in the past. Four Corners, as well, is also lacking in that.

So I think when we talk about in terms of cost, we are talking about realizing the true costs of coal. They've been getting off easy, and now they're having to pay and be accountable for the pollution that they've emitted.

We also think the state should be taking into account other viable data into the recommendation instead of basing their proposal solely on data provided by PNM. PNM is, obviously, a biased party in this, since they are the majority owner of the plant, and thus would have to pay the majority of the costs.

Yet we see that the EPA has proposed numbers that are definitely significantly lower than what the state has proposed. They put that in both their BART proposal for the San Juan Generating Station, and as was

noted during the presentation, they also sent a letter to you all and the Environment Department again noting those numbers and the big discrepancy between costs.

We still hold true that the cost of -- for SCR is cost effective and necessary. And again, as someone just noted, it will also be opportunity for jobs. We -- many people are looking at this as something that's taking away from the community. We should also look at this as an opportunity.

This is bringing jobs in not only through retrofits, but it also brings an opportunity to start transitioning over to renewables. Many people in that area are also looking towards opportunities in that.

And I would guess if you could ask a PNM ratepayer if they were able to get a job out of this, would they be willing to also pay a little bit more, and many people in this area are in need of jobs, and so there is an opportunity that many people would not want to pass up.

So this proposal needs to take more into account, as well as I referenced the health impacts, from the tourism impacts, how much dollars we get from that.

So while PNM also uses the -- and the state is using the excuse that this is a big impact on ratepayers, we are also seeing that there's a current

1 rate case going on with PNM right now, and I don't necessarily see them using that excuse when they're 2 3 using -- when they're asking for a rate increase from their ratepayers. 4 So in conclusion, myself and the 6,000-plus 5 6 members of Sierra Club in New Mexico stand in opposition 7 of this state SIP proposal and instead still stand 8 behind the cost-effective and just proposal of the EPA to install SCR controls on the San Juan Generating 9 Station. 10 Thank you for your time. 11 12 MS. ORTH: Thank you, Mr. Reynosa. 13 Virginia Miller. Is Ms. Miller here? 14 15 MS. NOEL: Are you saying Sue Noel? MS. ORTH: Virginia Miller. 16 17 MS. MILLER: Yeah, right here. VIRGINIA MILLER 18 19 having been first duly sworn or affirmed, was 20 examined and testified as follows: DIRECT TESTIMONY 21 22 THE REPORTER: Would you state and spell your 23 full name, please. 24 MS. MILLER: My name is Virginia J. Miller, 25 and I'm a resident of Santa Fe, New Mexico.

Thank you for listening, members of the Board and the community.

Please strengthen the New Mexico Environmental Improvement Board plan to reduce nitrogen oxide and other harmful pollutants at the San Juan coal plant in Northwest New Mexico to at least match the current EPA plan, which is much stronger. It is way past time to take curbing global warming seriously and create conditions for health of both our people and environment.

Clean energy alternatives exist. Develop them. The San Juan coal plant emissions are a big contributor to the harsh realities of climate change and health problems, asthma, emphysema and other respiratory diseases, and even premature death.

People leave polluted areas, urban areas to visit New Mexico's beautiful national parks, hoping to find clean air to breathe. I moved to New Mexico to find cleaner air to breathe.

So I'm asking you to please recommend pollution reductions equal to the current EPA plan or stronger.

Thank you.

MS. ORTH: Thank you, Ms. Miller.

Those are the names of the folks who both

- signed in and put a check or X in the Yes column. There will be -- thank you.
- There will be other opportunities to offer

 public comment. I'll invite public comment at the end

 of every party's -- technical party's presentation.
- Is there anyone else who must give comment this morning before we take a break?

No?

8

9 Thank you.

- Board, are we ready for a break?
- MS. PEACOCK: Yes.
- MS. ORTH: Thank you.
- 13 Let's take 15 minutes.
- 14 (Proceedings in recess from 11:08 a.m. to
- 15 11:27 a.m.)
- MS. ORTH: All right, folks. Let's come back
- 17 from the break, please.
- 18 Before the break, we completed the
- 19 Department's presentation and also accepted several
- 20 | public commenters.
- 21 We turn now to the presentation by the Public
- 22 | Service Company of New Mexico.
- 23 Mr. Alvidrez.
- 24 MR. ALVIDREZ: Yes. Thank you, Madam Hearing
- 25 | Examiner, Madam Chairman, members of the Board.

My name is Rick Alvidrez, and I'm the attorney for Public Service Company of New Mexico, PNM, in this case.

And I have a very few brief opening remarks that I hope will aid the Board in its consideration of the matters before it today and for the next couple of days.

As you know, we're here to consider a regulation on regional haze. And I think it's important to note that that really is the focus in terms of this Board's assessment of the adequacy of the NMED proposal, that is does this meet the federal requirements under the federal Regional Haze Rule.

There certainly has been a lot of discussion about other matters, health-related effects and what have you, but those matters are really not before the Board. The question before the Board is does this regulation meet the requirements.

And, of course, PNM has submitted testimony in this case to support the measures that the NMED is proposing with respect to the San Juan Generating Station, which is a generating station at issue in this case, not the Four Corners Generating Station which has been referred to by some commenters.

In our case, we will be supporting the NMED

position and presenting testimony of Patrick Themig, who is vice-president of generation. Mr. Themig will talk about PNM a little bit, provide some overview about San Juan, its importance to New Mexico as an electric supplier, as well as its economic importance to the Four Corners area.

Mr. Themig will also talk about the recent environmental upgrades that PNM has undertaken at San Juan at the cost of in excess of \$300 million and the positive benefits in terms of air emissions that have resulted from those upgrades and that investment by the San Juan owners.

And he will also talk about why PNM supports the NMED proposal, BART proposal with respect to San Juan.

We'll also be presenting Gerard Ortiz, who is executive director of New Mexico retail services for Public Service Company of New Mexico. And Mr. Ortiz is going to address the rate impacts of the technology, selective catalytic reduction, or SCR, and also SNCR, selective noncatalytic reduction, which is embodied in the NMED proposal.

So the Board will have that testimony to consider in terms of assessing the economics and the cost effectiveness of the various technologies that have

been considered.

And we will also be presenting two witnesses from Black & Veatch, which is the contractor that PNM hired to undertake the BART analysis back in 2007 and continued on working on that project to the present time.

You will hear from Diane Fischer and Kyle

Lucas, both of whom have extensive experience with

respect to BART determinations and more specifically

pollution control technology, including SCR. And they

will be able to answer your questions about the cost

effectiveness and their analysis of the various

technologies that were considered, why some technologies

were considered as cost effective, why some were not.

And they will also be able to detail the differences between the EPA proposal for SCR for San Juan that's embodied in the FIP versus the differences and the costs that PNM has submitted.

I would note that the issue before this Board, the proposal before this Board really is the NMED proposal. That is, there has been no -- no testimony, no technical testimony submitted in this case that would support a determination that SCR is appropriate for San Juan.

No party has come forward with technical

testimony to support that. While there have certainly
been comments, public comments, that urge the Board to
go in that direction, from a technical and evidentiary
standpoint, there simply isn't any evidence before this
Board to consider or to require implementation of SCR in
this case.

And I also, finally, do want to highlight a significant development with respect to the choices between the two technologies that occurred.

You heard, of course, the NMED talk about the cost impact to ratepayers as being a very significant consideration in their determination that SCR was too expensive.

But from a technology and BART standard standpoint, there was another significant difference that occurred between PNM's initial submittal of its BART determination and the present, and that had to do with SNCR technology and the ability of that technology to achieve what the EPA has classified as the presumptive limit for NO_{x} .

And with the developments that have taken place in the past few years, it became apparent that SNCR technology could, in fact, reach the EPA's own presumptive limit for NO_{x} . So by the adoption of SNCR technology, the EPA's presumptive limit for NO_{x} will be

met. And we think that that is a critical element in terms of this Board's consideration of the factors in the BART determination process.

And we also note that in terms of the modeling that has taken place, you've heard about the WRAP modeling and the numbers that were used to calculate whether reasonable progress could be made, that that presumptive limit, the .23 limit, will beat the .27 limit that WRAP set as the goal to stay on track to -- to meet the reasonable progress goals for visibility.

So with that, what I would like to do now is call our first witness, Patrick Themig, to testify in

14 If I may proceed.

this case.

MS. ORTH: All right.

If you would have all of your witnesses here sworn in.

MR. ALVIDREZ: Okay. Let me have all -- all of the witnesses who will be testifying on behalf of PNM stand up now and go ahead and be sworn in.

(PATRICK THEMIG, GERARD T. ORTIZ, DIANE M.

FISCHER and KYLE LUCAS were duly sworn or

affirmed.)

MS. ORTH: Please go ahead.

MR. ALVIDREZ: Thank you.

PATRICK THEMIG

2 having been first duly sworn or affirmed, was

3 examined and testified as follows:

DIRECT EXAMINATION

5 BY MR. ALVIDREZ:

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- Q. Mr. Themig, can you please state your name for the record?
- A. My name is Patrick Themig. That's
- 9 P-A-T-R-I-C-K T-as-in-Tom-H-E-M-I-G.
- Q. And, Mr. Themig, can you tell us where you're employed?
- A. I'm employed with PNM as vice-president in generation.
- Q. And have you prepared and have filed on behalf
 of Public Service Company of New Mexico prefiled written
 testimony in this case, which has been marked as PNM
 Exhibit A?
- 18 A. Yes, I have.
- 19 Q. And do you have any changes to that testimony?
- 20 A. No, I do not.
- Q. And sitting under oath here, do you now adopt that prefiled testimony as yours in this case?
- 23 A. I do.
- Q. Mr. Themig, can you briefly provide the Board with a summary of your experience and educational

background relevant to the matters in this case?

- A. Sure. I've been in the utility business going on 35 years, holding a number of capacities from engineering plant operations to construction in the facilities. I have a degree in mechanical engineering technology.
- 7 MR. ALVIDREZ: And with that, we would move 8 the admission of PNM Exhibit A into evidence.
- 9 MS. ORTH: Objections?

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- 10 Hearing none, it's admitted.
- 11 (Exhibit PNM A admitted into evidence.)
- Q. (BY MR. ALVIDREZ) Mr. Themig, can you briefly summarize for the Board the salient elements of your testimony?
- 15 A. Sure. I'd be happy to.
 - San Juan generating facility is a critical resource for PNM. It provides base load capacity. And that base load capacity is different than what you might see from, say, a renewable source or intermittent source. It provides it low cost, reliable and safe, providing energy to 500,000 PNM customers, another 500,000 New Mexico customers for other owners, and then roughly a million customers from other states.

ownership structure. PNM is the only party that owns an

The plant is -- has got an interesting

interest in four units. We own half of Units 1 and 2,
we own half of Unit 3, and we own 37 percent of Unit 4.

And then there are various owners, another owner in
Units 1 and 2, there's two other owners in Unit 3, and
there's five other owners in Unit 4. So it's kind of an

6 interesting makeup of the ownership structure.

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And the reason that's kind of important is that when you look at capital investments, it's not just a PNM decision that's made by this ownership structure. It's from a process that's developed under participation agreements and other agreements that support the project.

PNM has the San Juan coal -- the San Juan Generating Station. We also own an interest in the Four Corners Plant. And just for clarification, Four Corners is roughly seven miles south of the -- the San Juan River and San Juan Generating Station is roughly six miles north of San Juan River.

We also own nuclear, which is base load resource. We own wind, and we own solar, and we own natural gas resources. And the natural gas resources are really kind of designed to regulate the system for -- for the intermittency of such things as renewable.

Unfortunately, though, we don't always run

natural gas units. There are times when the only thing we have on to regulate with is San Juan, and San Juan tends to act in that capacity to regulate on the intermittence.

San Juan facility employs roughly 400

full-time equivalents. The San Juan Coal Company, which
is the exclusive provider of coal, employs over 500

full-time equivalents. And of those, San Juan, roughly
22 percent are Native American, at the San Juan
generating facility, roughly 44 percent from the San
Juan Coal Company are Native American.

So this provides a very reliable and stable economic value to employees in the Four Corners area.

It's important to realize that the San Juan facility has an annual payroll of roughly \$56 million. We pay coal royalties of roughly 55 million per year, and these are annual -- annual payments, 6.4 million to San Juan County in property taxes. 30 million goes to material supplies that we need to run the facility, like limestone and other -- other costs that are needed. And then roughly 4 hundred million is spent on contract services that -- that help support the maintenance activities, the ongoing operational activities.

So you can see that the facility provides a very, very strong economic stimulus to the Four Corners

area and to the State of New Mexico in general.

In 2005, PNM embarked on environmental upgrades, and three of which contributed to reduction in haze. Total cost, as been referenced earlier, was \$320 million.

And the technologies that were deployed were pulse-jet fabric filters, and that is to collect particulate matter which directly impacts regional haze; sulfur reduction, there was a 71 percent reduction in sulfur, which is another contributor; and NO_x , and the NO_x was a combustion modification that reduced our nitrogen oxide emissions by roughly 44 percent.

So there's not a lot of discussion going on around the first two, which are ${\rm SO}_2$ reduction and particulate matter, because this plant is best available control technology on those two. So the focus is on the ${\rm NO}_{\rm x}$.

And while our BART analysis that was conducted -- and there will be members of -- that you will hear from later that will talk about the analysis and what went into the analysis. While that analysis concludes that those control upgrades that PNM and the owners invested in from 2005 to 2009 meet BART, pursuant to the criteria, PNM is supporting the proposal by the state.

1	And the reason is it furthers the goal of
2	additional NO_x and SO_2 emission reductions, and it but
3	it does so with a balance on cost impact to our
4	customers. So we're supporting that.
5	And thank you for my time.
6	MR. ALVIDREZ: Thank you, Madam Hearing
7	Examiner.
8	We'd tender this witness for questioning.
9	MS. ORTH: All right. Thank you.
10	Mr. Grantham, do you have questions?
11	MR. GRANTHAM: No questions.
12	MS. ORTH: Mr. Roybal?
13	MR. ROYBAL: No questions.
14	MS. ORTH: Mr. Rose?
15	MR. ROSE: No questions.
16	MS. ORTH: Mr. Schlenker-Goodrich?
17	MR. SCHLENKER-GOODRICH: No questions.
18	MS. ORTH: All right.
19	Thank you very much, Mr. Themig.
20	Oh. I'm sorry. The Board. Very sorry.
21	Does the Board have questions of Mr. Themig
22	based on his testimony?
23	EXAMINATION
24	BY THE BOARD:
25	MR. BRYCE: I have one quick question.

The multi-million -- \$77 million, or whatever
the real number is, that is to be expensed under the

SNCR plan, how difficult is it to accept that if you
thought you may already meet the best available
technology criteria with the upgrades you've already
done?

MR. THEMIG: It's always difficult to accept additional cost to a facility. But one has to look at what the alternatives are with the federal EPA proposal that's out there, which is -- which is, you know, borderline billion dollar investment, and if we look at what the state has proposed, which again furthers this -- this goal of achieving a visibility by 2064, that's 53 years out in the future, we believe this actually takes that next step towards achieving that 2064 goal.

MR. BRYCE: When I look long-term, you know, wise investment in the short-term seems to be the goal, and if long-term, say 50 years from now, or much more clean energy than we are today.

I guess my first question is how many years -what's the useful life of the current plant? How many
more years? Is it 50 years, or how long do you think
the plant will be continuing to run?

MR. THEMIG: We currently have a depreciation

schedule that takes us out to 2053 time frame.

MR. BRYCE: Likely to be an extension after that, or --

MR. THEMIG: There could be. It all depends, and it depends on what the total cost impact is of either future regulations or other technologies that might emerge.

If the country embarks on a nuclear program to develop base load -- and that's what we really need, is base load replacement for a facility like San Juan. You know, if the country embarks on it and embraces nuclear programs, that ultimately may be a more cost-effective resource for us in -- sometime out in the future.

But that will be determined by -- you know, we do this integrated resource planning process that looks at all the variables, all the contributors that tie to a resource that we have, and through that public process there comes out a plan that's like a three-year or five-year plan.

So hopefully we'll have solutions for the future that make sense.

MR. BRYCE: We hear lots of comments from people with renewable energy and solar and wind and intermittent sources. And nuclear -- is there anything -- I might be off topic here.

Is there anything that the public should know about the viability of nuclear for the future?

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Because it seems to have been on hold for so long that it seems to have dropped off the radar screen.

MR. THEMIG: As I said, PNM owns -- we own 400 megawatts of Palo Verde Nuclear Station's base load. Two of the units are part of the jurisdictional load serving New Mexico. The Unit 3 is a merchant -- merchant load, but very reliable, very safe.

Now, you may argue that looking at what's taken place in Japan, but those were very, very unusual circumstances with -- that contributed to the issues that are there.

We are currently studying some of the new nuclear technologies. There are some designs that are on the drawing board that are for small nuclear modular reactors, that are actually built underground, that are in the 125- to 200-megawatt range, that could be disbursed across various service areas, and we're looking at that. It's some years off.

I think the first company that's committed to one of those technologies was TVA, and they're looking at 10 to 12 years before that first unit goes commercial.

So through that time frame, between now and

then, we'll continue to study nuclear.

MR. BRYCE: Thank you.

MS. ORTH: Other Board questions?

MR. FULFER: I'm understanding that this \$320 million upgrade started back in 2005 and it was completed in 2009; is that right?

7 MR. THEMIG: The consent decree was signed in 8 2005. Construction commenced, I think, late 2006, or 9 maybe early 2007.

MR. FULFER: What brought this 320 investment on? What started it?

MR. THEMIG: It was an agreement under the consent decree to install the new technologies, which were baghouse -- poststrip baghouse, combustion modifications for NO_{x} and an elimination or bypass of flu gas around the scrubber so we're scrubbing 100 percent of the flu gas.

MR. FULFER: Do you normally see a time period, say three, five, seven years, that you get to recapture your investment?

MR. THEMIG: Investment recapture would be -actually, it's kind of outside my realm. It's actually
our accounting group who would look at all the variables
on depreciation schedules and earnings and on and on.
So it just kind of depends.

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If you install a capital pump, which is a small item, that has a life of five years, you recover your investment in five years. If you install a large investment, say, like an SCR, you'd have many more years you'd have to do the recovery over.

MR. FULFER: As far as going to like the ratepayers and trying to recapture your costs, what time period do you normally look at on that?

MR. THEMIG: We look into -- and Gerard Ortiz will provide more comment on rate impact and the timeline for that, but essentially as soon as the project is completed, we do a filing in a rate case for the initial recovery of that investment.

MR. FULFER: So really if you look back at the timeline that you started on this BART, the -- your investment that you've already put forward -- will it count -- will some of these count toward -- or can you use some of your investment in this new technology -- will it -- will it come forward -- I guess what I'm trying to say, come forward in the -- in your new program, if you -- if it was --

MR. THEMIG: Yeah. If I could clarify. Are you referring specifically to ${\rm NO_x}$, or are you talking --

MR. FULFER: The NO_x .

MR. THEMIG: -- about the other technologies
that --

MR. FULFER: The NO_x .

MR. THEMIG: The NO_{x} . The NO_{x} actually takes -- reduces the total emission by another factor, and -- and it -- the answer to the question, it all depends. If we're able to utilize the ammonia -- ammonia injection for the SNCR, and that technology is being developed now, then we could utilize the capital that's invested for the tanks and the regulators that take the ammonia to the boiler.

If we're required to use some other chemicals, like urea, for the SNCR technology, then it would be less likely to utilize that equipment.

MR. FULFER: So you feel like there's been a significant improvement in the SNCR technology?

MR. THEMIG: There has, and that is one of the reasons SNCR is now able to meet this presumptive limit that's 0.23 pounds per million BTU, is because of the technology enhancements and the way that the suppliers are able to actually get mixing of the urea and the flue gas stream and get more reactivity for the NO $_{\rm x}$ reduction.

MR. FULFER: That's all I have.

MR. CASCIANO: I have one question.

You mentioned the improvement with the low ${
m NO}_{
m x}$

burners and the 44 percent on the -- on the NO_x emissions since 2005, I guess, that improvement.

MR. THEMIG: Well, it wasn't -- the construction activities actually concluded in early -- or in 2007, '8 and '9, during outages, so that the total ${\rm NO_x}$ reduction was phased in over those times, as we had unit outages to do the work.

MR. CASCIANO: And I guess my question is have there been other environmental improvements to the facility prior to 2005, in the recent set of improvements?

MR. THEMIG: There have. And I don't know the whole history. I've been with PNM for three years.

But there was a sulfur -- sulfuric acid manufacturing plant that was added to the back of the plant. It's been a number of years. And then that was subsequently converted to -- parts of it were converted to what -- flue gas scrubbers. And there were electrostatic precipitators initially installed on the facility.

There may have been upgrades. But those are the two that I really recall.

MR. CASCIANO: Okay.

And can you give me a sense of the trend line for $\ensuremath{\text{NO}_x}\xspace$?

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1 I mean, maybe where we are now and where we 2 were five years ago and ten years ago from the facility. 3 MR. THEMIG: Sure. I'd be happy to. 4 What -- and there may have been low NO_{x} burners 5 installed at some point. When the plant was originally 6 designed, it probably had just traditional combustors, 7 and they may have installed low NO, burners. But our 8 permit limit prior to the environmental upgrade was 9 .5 pounds per million BTU, and then we now are permitted 10 .3 pounds per million BTU, and we operate just slightly under that. So we have some latitude for variability in 11 12 operations. 13 And then with SNCR, that would drop to .23, so 14 we'd operate actually below .23 pounds per million BTU. 15 MR. CASCIANO: Okay. Thank you. 16 MS. ORTH: Other Board questions? 17 Mr. Alvidrez, do you have follow-up? 18 MR. ALVIDREZ: I have no follow-up. 19 Thank you. 2.0 MS. ORTH: All right. 21 Is there any reason not to exclude Mr. Themig? 22 No? 23 Thank you very much, Mr. Themig. 24 MR. THEMIG: Thank you. 25 MR. ALVIDREZ: We can proceed, or if this is

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1 | the time you want to take a break and --

MS. ORTH: What's the Board's pleasure?

MS. PEACOCK: Let's proceed.

MS. ORTH: All right.

Please go ahead.

MR. ALVIDREZ: Thank you.

With that, we'd like to call Gerard Ortiz.

GERARD T. ORTIZ

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT EXAMINATION

12 BY MR. ALVIDREZ:

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MR. ALVIDREZ: If we may proceed.

MS. ORTH: Yes, please.

- Q. (BY MR. ALVIDREZ) Mr. Ortiz, you've been
 sworn, as you are aware, but can you please state your
 name for the record?
- 18 A. My name is Gerard T. Ortiz.
- Q. And can you please tell the Board where you're employed and in what capacity?
 - A. Yes. I am the executive director of New Mexico Retail Regulatory Services for PNM Resources in Albuquerque. In my current role, I'm responsible for the group that puts together the fuel forecasts, the group that manages and makes all of our NMPRC regulatory

- filings, cost of service and pricing, as well as the group that develops and proposes to the commission our energy efficiency programs.
- Q. And, Mr. Ortiz, have you prepared prefiled testimony in this case that we have marked as PNM Exhibit B?
- 7 A. Yes, I have.
- Q. And do you have any changes or corrections to your prefiled testimony?
- 10 A. I do not.
- 11 Q. And do you now adopt that testimony under oath in this proceeding?
- 13 A. Yes, sir.
- MR. ALVIDREZ: With that, Madam Hearing

 Officer, we would move the admission of PNM Exhibit B into evidence.
- MS. ORTH: Are there objections?
- 18 Hearing none, it's admitted.
- 19 Thank you.
- 20 (Exhibit PNM B admitted into evidence.)
- Q. (BY MR. ALVIDREZ) Mr. Ortiz, can you briefly summarize the salient topics of your prefiled testimony for the Board?
- A. Yes, sir. I would like to begin by providing
 a beef -- brief summary of my background and experience.

I received a bachelor of science in electrical engineering from New Mexico State University in 1981. I completed a master of business administration with a concentration in finance from the Anderson School of Management at University of New Mexico.

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And I've been employed by PNM for 30 years in various engineering, business planning, marketing and regulatory capacities.

The purpose of my testimony in this proceeding was to provide the bill impact or the ratepayer bill impact associated with installing either SCR or SNCR technology at San Juan Generating Station.

Based on analysis, cost analysis that was prepared by Black & Veatch, taking into account the capital costs, the O&M and the depreciable life of the two technologies, the estimated first year bill impact for SNCR is \$10.93, or slightly less than \$1 a month. That represents a 1.4 percent increase to a customer's bill.

SCR technology, on the other hand, represents a first year bill impact of \$85.31, or slightly more than \$7 per month. This represents 11. -- an 11.3 percent bill impact to PNM's New Mexico retail customers.

The point that I would note with re --

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relative to either of these is the SCR increase of
1
2
    11.3 percent provides no additional capacity with which
    to serve PNM's retail loads.
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              MR. ALVIDREZ: And with that, that concludes
    our presentation of Mr. Ortiz' testimony, and we would
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6
    tender him for questioning.
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              MS. ORTH: Thank you.
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              Mr. Grantham, do you have questions?
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              MR. GRANTHAM:
                             No questions.
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              MS. ORTH: Mr. Roybal?
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              MR. ROYBAL: No questions.
12
              MS. ORTH: Mr. Rose?
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              MR. ROSE: No questions.
              MS. ORTH: Mr. Schlenker-Goodrich?
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              MR. SCHLENKER-GOODRICH: A few questions,
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    please.
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                         CROSS EXAMINATION
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    BY MR. SCHLENKER-GOODRICH:
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         Q.
              Good morning, Mr. Ortiz.
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              Erik --
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              Good morning.
         Α.
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              Erik Schlenker-Goodrich with NRDC, San Juan
         Q.
23
    Citizens Alliance and WildEarth Guardians.
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analysis.

Just a few questions on your ratepayer impact

- You took a look at solely ratepayer impacts;

 is that correct? Or was there a broader -- any sort of

 broader economic analysis done of costs?
 - A. No, sir. I looked at the projected first year bill impact.
 - Q. Did you do any sort of quantitative analysis of the economic costs that would be borne by potentially the difference between increased health impacts between SCR and SNCR technologies?
- 10 A. No, sir.

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- Q. Did you do any sort of quantitative analysis
 of potential visibility or environmental impacts to the
 Class I wilderness or national park areas?
- A. No, sir. The purpose of my testimony was simply to quantify the ratepayer impact.
 - Q. And one moment, please.
- No further questions.
- 18 MS. ORTH: Thank you, Mr. Schlenker-Goodrich.
- 19 Anyone else?
- Do Board members have questions?
- 21 Questions from the Board?
- If there's no reason, then, not to -- oh, I'm
- 23 sorry.
- 24 Mr. Alvidrez, do you have follow-up?
- 25 MR. ALVIDREZ: I do have no redirect. Thank

1 you.

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MS. ORTH: All right.

Thank you very much, Mr. Ortiz.

4 MR. ORTIZ: You're welcome.

MS. ORTH: You have two more, I believe.

6 MR. ALVIDREZ: Yes. I have two more to

7 present as a panel.

8 MS. ORTH: All right.

MR. ALVIDREZ: And with that, I'd ask

10 Mr. Lucas and Ms. Fischer to join me up here.

MS. ORTH: They're already sworn.

MR. ALVIDREZ: If I may proceed.

MS. ORTH: Please.

14 DIANE FISCHER and KYLE LUCAS

15 having been first duly sworn or affirmed, were

16 examined and testified as follows:

17 MR. ALVIDREZ: Let me start with you,

18 Ms. Fischer.

Can you please state your name and place of

20 | employment for the record?

21 MS. FISCHER: Yes. My name is Diane Fischer.

22 | I work at Black & Veatch.

MR. ALVIDREZ: And, Ms. Fischer, did you, in

24 | conjunction with Mr. Lucas, prepare prefiled testimony

25 | that has been submitted as PNM Exhibit C in this case?

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MS. FISCHER: Yes, sir.

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2 MR. ALVIDREZ: And do you have any corrections 3 to PNM Exhibit C?

MS. FISCHER: Yeah. We do have a few minor typographical corrections that we'd like to make.

The first one is on page 9, at the end of line 14. We accidentally left off NO_x Star Technology as a technology we consider infeasible. It's in our BART analysis, but it just got left off of the testimony.

On page 17, line 7, the sentence reads right now, "Additionally, air quality relative values." It should say "related values" instead of "relative." Just a typo there.

And then on page 24, line 19, the sentence should read, "PNM Exhibit B&V-4 summarizes the cost of SNCR at San Juan." So I'd like to just rephrase that sentence.

MR. ALVIDREZ: And, Ms. Fischer, with those corrections that you've just made, do you adopt your prefiled testimony here under oath?

MS. FISCHER: Yes.

MR. ALVIDREZ: Turning to you, Mr. Lucas, please state your name for the record.

And you might get closer to the mike.

MR. LUCAS: Certainly.

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- 1 My name is Kyle Lucas. 2 MR. ALVIDREZ: And where are you employed, 3 Mr. Lucas. 4 MR. LUCAS: I've been employed at Black & 5 Veatch for 17 years. 6 MR. ALVIDREZ: And, Mr. Lucas, again, did you, 7 in conjunction with Ms. Fischer, prepare prefiled 8 testimony in this case that we have marked as PNM 9 Exhibit C. 10 MR. LUCAS: Yes. 11 MR. ALVIDREZ: And you heard the corrections 12 that Ms. Fischer made with respect to that testimony. And let me ask, with those corrections, do you 13
- MR. LUCAS: Yes.

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case?

MR. ALVIDREZ: At this time, I'd like to move
the admission of PNM Exhibit C into the evidentiary
record.

adopt that testimony as your sworn testimony in this

- MS. ORTH: Are there objections?
- 21 Hearing none, it's admitted.
- 22 (Exhibit PNM C admitted into evidence.)
- MR. ALVIDREZ: With that, I'd call on
- 24 Ms. Fischer to provide a brief description of her
- 25 | relevant experience and educational background.

MS. FISCHER: I've been now with Black & Veatch for 19 years. I have a reg- -- I'm a registered mechanical engineer in the State of Missouri. I am a graduate of Iowa State University with a bachelor of science in mechanical engineering.

I've spent 19 years with Black & Veatch, and the entirety of that time on air quality control projects. My specialty area is NO_x control. I've spent the last 11 years or so almost solely on NO_x control projects.

I also have been involved in three BART analyses and more than I could count when I was trying to add it up BACT analyses which are similar. So --

MR. ALVIDREZ: And there are certain portions of the testimony, I think, that you perhaps had the greater hand in, and if you can kind of summarize for the Board, hit the high points of the areas of your prefiled testimony that you concentrated on, please.

MS. FISCHER: Sure.

I was the project manager for the project, and -- and Mr. Lucas was the assistant project manager. Roughly 20 people at Black & Veatch contributed some part to the work that we did for this BART analysis since we started the work in February of 2007.

So for the testimony today, I'm going to focus

- more on the engineering and the cost estimate and work
 that we did, and Mr. Lucas is going to talk more about
 the modeling side of the work that we did.
- I do want to kind of go through this -- should

 I go through the steps so -- that we went through?
- We followed the EPA guidelines for BART

 analysis, and in that -- in that guideline, they ask

 that you consider five factors in evaluating BART.
- 9 The first is to -- the first is the cost of 10 compliance.
- The second is energy and non -- nonair quality environmental impacts.
- The third factor is the existing control technologies that are installed.
- The fourth is the remaining useful life of the plant.
- And the last is the degree of visibility improvement.
- So those are the five factors that the EPA

 BART guidelines require us to look at.
- And in doing that, they've developed a five-step process that we followed.
- The first step is to identify the available retrofit control technologies that can be applied.
- The second step is to eliminate those

technologies that are considered infeasible.

The third is to take the ones that are feasible and evaluate the amount of control that can be done with those technologies.

The fourth is to determine the impacts. And that's where you get into the factors that we talked about before.

And then the last is to assess the visibility impacts of each technology.

So those are the steps that we went through.

I also want to highlight -- on page 2 of our testimony is a summary of the -- kind of the history of our submittals to the NMED. It lists out all the submittals that we made. We've made quite a number of them. They typically had to -- fell into one of three areas.

One, the -- the modeling continued to evolve as we were going through this project. The -- there continued to be new -- and Mr. Lucas can talk more about this -- new additions to the modeling methodology. And so we had several submittals related to that.

We also had several submittals related to specific questions from the NMED. So we responded to those questions.

And then there were a couple that were more

1 generally informational that we made.

But the one I want to highlight, of course,

and the main reason we're here today, is the

February 11, 2011, submittal of a revised SNCR BART

analysis. And that has been the focus of this hearing.

We submitted that BART analysis in response to updates in the -- in the SNCR technology from our original BART that would allow it to meet the presumptive limit. And so then we resubmitted the BART analysis.

And if you look on page -- finding it -- 17, I believe -- I'll get there -- 17 of our testimony is the summary of the costs that we put together for the revised BART analysis from February, 2011.

The end result of that was a reduction of about 4,900 tons per year of NO_{x} at a cost of roughly \$3,500 a ton.

So that -- that concludes what I wanted to say about our testimony.

MR. ALVIDREZ: Mr. Lucas, if you could please briefly summarize for the Board the portions of the prefiled testimony that you focused on.

MR. LUCAS: Certainly.

First of all, I'd like to give you a little background on myself.

I have worked at Black & Veatch, again, for 17 years, initially started as an air quality scientist, conducting modeling studies and working through various calculations on air permit applications. I then moved on to becoming an environmental permitting manager at Black & Veatch, where I oversaw various strategy analyses and other licensing projects.

For this project, I oversaw the modeling analyses from 2007 until February, and I've also assisted as the assistant manager to help facilitate the engineering studies ongoing throughout this process.

As Diane had noted earlier, I will be focusing on the modeling aspects of the analysis that are presented here, specifically over the course of the four-year period.

We initially began with the project by developing a modeling protocol document, using a route template as our guidance. Through that, we established our modeling methodologies, the model itself, the meteorological data, determining data, operational characteristics of the units, pre- and postcontrol scenarios, and also specific receptors in the Class I areas.

All of those parameters and methodologies were submitted to NMED as part of our overall methodology to

perform the analyses for the required guidelines.

2 With that, we ended up submitting, as

3 Ms. Fischer had noted, our February, 2011 analysis.

4 | Before then, and following our June of 2007 -- I'm

5 | sorry -- yeah, June, 2007 analysis, we submitted six

6 | additional modeling analyses that either updated the

7 | modeling for various regions, looked at various air

8 | quality control analyses, updates, or responded directly

9 to NMED questions or concerns that they had.

The submittals that we have made are

11 | summarized on page 2 of our testimony.

12 I'd be happy to answer any questions that you

13 | may have at this time.

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MR. ALVIDREZ: And with that, we tender these

15 | witnesses for questions.

MS. ORTH: Thank you.

17 Mr. Grantham?

18 MR. GRANTHAM: No questions.

MS. ORTH: Mr. Roybal?

MR. ROYBAL: No questions.

MS. ORTH: Mr. Rose?

MR. ROSE: No questions.

MS. ORTH: Mr. Schlenker-Goodrich?

MR. SCHLENKER-GOODRICH: No questions.

MS. ORTH: Anyone else?

Board members, do you have questions of the Black & Veatch panel, Ms. Fischer and Mr. Lucas, based on their testimony?

EXAMINATION

BY THE BOARD:

2.4

MS. RYAN: I have some questions regarding the maximum visibility improvements to each unit and then that in comparison to your -- and in relation to your cost effectiveness analysis and so forth.

I think it would be beneficial for our Board if you would walk us through that a little bit and the -- looking at the -- on page 22 of your Exhibit C, and moving on to the next couple of pages.

Could you summarize how you came to those opinions and how -- how effective is this SNCR and -- you know, there's some general statements here that it's going to improve, but -- but I would like you to address specifically.

MR. LUCAS: Certainly. The way we conducted our engineering analysis and our modeling analysis was first to develop a baseline of a facility, and as earlier testified by others, the facility baseline was the consent decree controls that began in 2005 and finished in 2009.

From that, we addressed various feasible and

infeasible technologies, eliminated the infeasible ones and developed design parameters for those that we took into the modeling analyses.

We looked at each of the feasible controls.

In this case, we'll talk specifically about SNCR. Okay.

And looked at it as compared to the visibility

improvement gained against the baseline scenario. We

looked at that also for all the 16 Class I areas that

are within the 300-kilometer radius and also governed by

the guidelines.

What we ended up doing, simplistically, is after we developed the baseline model with all the parameters that I spoke of earlier, site-specific characteristics, meteorological data, three-dimensional meteorological data, various other trained considerations and so forth, we then modeled the baseline scenario for the plant for all four units, both on a facility-wide basis and an individual unit basis, so that we could contrast and compare.

And then we took the SNCR scenario at its .23 million $\mathrm{NO_x}$ emission rate, per that instant model, repeated the analysis, and came up with another set of results on the visibility basis, a deciview basis.

And for reference, a deciview is the metric that the guidelines use. It is comparable to a percent

change in visibility. So roughly a 1 deciview improvement would be comparable to 10 percent change of visibility. Okay.

From that point, we went ahead and took our facility baseline and subtracted from the visibility improvement scene or visibility result scene from the SNCR scenario, and on a facility-wide basis, the deciview number is a .25 improvement at one of the 16 Class I areas.

On a unit-by-unit basis, the same analysis was done, and those impacts range from -- on the bottom of page 22, range up to a .18 deciview change on an individual unit basis.

I should note, though, that it is not appropriate to add individual units up in this manner, because you have to look at it as a facility total.

Individual units and their characteristics within the model act independently and not act as a whole.

And so when we looked at individual unit impacts, it was not Unit 1 operation, Unit 2 operation and so forth. When you look at total facility improvements, you want to look at the combined facility operating and being modeled at the same time.

MS. RYAN: So in the comparison you made, 1 deciview equals basically a 10 percent change in --

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              MR. LUCAS: Visibility.
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              MS. RYAN: -- my human eyesight visibility of
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    what I'm looking at.
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              So could you do the math for me and how -- you
5
    were saying a .25 deciview change?
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              MR. LUCAS:
                          It's about a 2.5 percent
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    visibility change.
              MS. RYAN: We're not talking about a lot here.
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              How is that compared to the SRC, what they
10
    propose with the -- the visibility change?
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              MR. LUCAS: The SCR case that Black & Veatch
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    submitted had a maximum of about 1.3 visibility
13
    improvement, so about a 1 -- about 13 percent visibility
14
    improvement.
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              The EPA has a threshold of 1 deciview --
              MS. RYAN: Um-hum.
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              MR. LUCAS: -- which they believe is a human
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    perceptible change, so 10 percent visibility change.
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              MS. RYAN: So EPA is shooting for a 13 -- if
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    I'm just hearing you correctly, a -- because I'm not a
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    scientist here -- a 13 percent, and would the
22
    noncatalytic reduction technology -- would be at --
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    would you repeat that percentage again?
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              MR. LUCAS: The deciview is .25, so it's a
25
    2.5 percent change.
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MS. RYAN: 2.5. Okay.

2.0

MR. LUCAS: Overall the 2.5 percent -- 2.5 -- a change of the .25 deciview by itself is less than the 1 deciview.

Overall, though, on a cumulative basis, when you look at other BART sources and other state and federal implementations for the Clean Air Act around, how -- and we spoke earlier about how all those were modeled together or will be modeled together in the 2013 and 2018 time frames. Those will all contribute to overall visibility improvements throughout the area.

MS. RYAN: Okay.

So that in comparison to the -- to the costs of each of the different technologies, the cost to achieve a 13 percent change and the cost to achieve a 2.5 percent change -- can you discuss -- walk us through that?

MR. LUCAS: Certainly. I'll turn this over to Ms. Fischer to walk through some of the more specific details.

MS. FISCHER: Yeah. The -- the costs for SCR for the four units would be, adding them up real quick, roughly \$900 million, for that 13 percent visibility. The costs for the SNCR is, you know, in the 70 million range.

So there's a pretty significant difference in -- in the costs between the two.

MS. RYAN: And not being a scientist, there's -- I'd just request you to explain the really large gap between 2.5 percent and 13 percent.

MS. FISCHER: There is one in between. It's called an SCR/SNCR hybrid, which we did analyze. And the easiest way to -- to talk about that is kind of like a baby SCR. Instead of building an entire SCR reactor to go all the way down to the .07 pounds per two NO_x , you try and fit as much catalyst into the existing duct or maybe just expand the duct a little bit and then apply SNCR with that.

So it's a combination of a -- kind of a baby SCR with a -- with an SNCR system.

And the problem with the -- and it did -- it did kind of hit an intermediate spot. You'd have to tell us what the deciview permit for that was. I don't recall it off the top of my head.

I don't know if you remember it.

MR. LUCAS: I don't either.

MS. FISCHER: Okay. But it was between.

And -- but the challenge is that as soon as you add that catalyst and you have to implement all the changes to the ductwork, you end up having to do all the

draft system convergence to make sure that the boiler can handle the new pressures in it.

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When you do all that, the end result is that the cost is, unfortunately, very close to a full SCR, but the -- but you can't get as much removal. And so the deciview is not as -- the deciview improvement compared to the cost is not as great.

The guidelines require you to draw a curve -- and I don't have a -- I'm using my hands now -- a curve that shows kind of the least cost effective line. And when you plot that SCR/SNCR hybrid on that curve, it's above the cost effectiveness line, whereas the SNCR and the SCR are more on that line.

In other words, you're going to get a better improvement for the money you spent with either of those two technologies, compared to the hybrid. So yes, there is an in-between, but it tends to not be looked at a lot because it isn't as cost effective a solution.

MS. RYAN: Thank you.

MS. FISCHER: Um-hum.

MS. ORTH: Other Board questions?

MR. CASCIANO: I have a few questions.

For the industry standard, I mean, can you characterize kind of the results of your experience with either BACT determination or BART determination for NO.

control and --

MS. FISCHER: Sure, yeah.

BACT is typically applied on new unit SCRs, and they're going to be a lot more cost effective on a -- on a capital and annual cost, mostly because you are building the plant with the SCR in mind right from the beginning.

And so those -- the costs for a new SCR are relatively low. You know, it's been a while since I've done one, but, you know, in the hundred dollars a kilowatt kind of number, compared to where we are in this project, which is more like \$300 a kilowatt.

When you do a retrofit, you have to go and modify the existing plant. You're working inside a plant that already has a lot of stuff in your way. The ductwork in the arrangement is not set up for the SCR, so you have a lot of rework to do. And -- so that's what jacks up the price.

The costs at PNM are higher than the industry average, and the main reason for that is because PNM is a forced draft unit. What that means is that it pushes the flue gas through the unit, instead of balancing the boiler. So the boiler is positive pressure.

In a balanced draft unit, the boiler is zero pressure. So you got a fan coming in to push the flue

gas into the boiler, and you have a fan at the outlet pulling the flue gas, and so the pressure at the boiler is zero. That's called a balanced draft unit.

PNM is a forced draft unit. And so when you go to do something like an upgrade for SCR, you have to meet National Fire Protection code NFPA 85, which requires you to go and reassess the draft impacts to the Unit.

You can't just put a fan downstream of the boiler without stiffening the boiler, so that it can handle that pressure, because if you lose the FD fan, the pushing fan, it will suck in -- suck in the boiler like a tin can.

And so the National Fire Protection code has written a standard that requires you to go and stiffen that boiler. And so in this particular situation, we have to do that. And so that's causing the costs specifically at San Juan Station to be higher than what we're seeing in the general industry for SCR retrofit.

MR. CASCIANO: So would I be correct in saying that BART has been determined in the industry to be anything from low NO_{x} burners to selective catalytic conversion, to selective noncatalytic conversion? Is --you know, is there a standard -- it doesn't seem like there's a one size fits all, because every facility is

- different, and it drives wide variations in the costs
 for the retrofitting.
- MS. FISCHER: Yes, sir. The standard is
 actually specifically stated that you have to do a
 case-by-case analysis. One of the challenges that we're
 seeing is a lot of these BARTs -- even though it's been
 a bunch of years, very few BART determinations are
 final. In fact, I think the only one I know of is the
 port -- is Portland Generating.
- 10 MR. LUCAS: Boardman station in Oregon.
- MS. FISCHER: Boardman station is the only
 BART that I'm aware of that is final and approved by EPA
 and official.
- All the other BARTs that I'm aware of are still out there in some stage of public comment or evaluation. So --
- MR. CASCIANO: Are you aware of any other

 BARTs for -- that have been rejected for selective

 catalytic reduction technology?
- 20 MS. FISCHER: The --
- MR. CASCIANO: Any other facilities where
 they've determined that -- similar to PNM's position,
 that it's not cost effective for that technology as a
 BART, and they've gone to their selective noncatalytic
 or gone to just low NO_x burners as the best available

retrofit?

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MS. FISCHER: The draft in Colorado for Craig

Station and -- is -- there are three units at Craig, and

they have been asked to put two -- one SCR on Unit 2 at

Craig and SNCR, which is the technology we're talking

about for here, on -- is it 1 and 3, I believe. So

that's -- that's -- but that's a draft.

That hasn't been finally approved by the EPA;

g is that right?

MR. LUCAS: There are several other facilities in Wyoming.

MS. FISCHER: Oh, yes.

MR. LUCAS: An initial determination by the facility through the BART was that SCRs or SNCRs were not feasible or not cost effective, but the state later came back and determined that the SNCRs to be that chosen technology.

A lot of those are being contested right now. But I don't know what the current status is.

MR. CASCIANO: Okay.

MS. FISCHER: The four -- the other thing is the Four Corners, which is governed by EPA Region 9 -- the EPA determination -- original determination was SCRs on all five units there. I think the current proposal out there is to shut down 1, 2 and 3 and just continue

to run 4 and 5 with the SCRs.

But their ${\rm NO_x}$ -- they're starting ${\rm NO_x}$ compared to PNM was significantly higher. They were at like .5 whereas, PNM is starting at like .3, so --

MR. LUCAS: What Diane is alluding to is the dollar per ton that you're also kind of getting to as the threshold, Four Corners had a higher initial NO_x -- uncontrolled NO_x rate of the middle 4s, I believe, .4, whereas San Juan --

MS. FISCHER: 4.5.

MR. LUCAS: -- is down to .3.

And the cost to install SCR at San Juan again is different than the cost to install at the San Juan Station simply because of some of the more complex features of -- site-specific features that San Juan has, including the balanced draft version that Ms. Fischer spoke of.

MR. CASCIANO: Okay.

MS. FISCHER: I apologize for not remembering the exact thing in Craig. I know at least one has an SCR and one has SNCR. I just can't remember if it's two at Craig that have SCR or one. But that could be verified.

But anyway, the only one that's final that I'm aware of is Boardman. All the others are in some state

of review or contesting.

MR. LUCAS: I have worked on five large BART projects at eight different plants for 23 different coal units, and I don't have a final determination yet from the EPA on any of those. The states have submitted their determination, and with their determination submitted their various SIPs to the EPA in various regions off the country, but we have yet to hear on any of those what the final determination's been.

MS. RYAN: We have no precedent for this Board to work off of on what the likelihood that EPA would approve our SIP if this was implemented?

MS. FISCHER: Not much.

MR. LUCAS: I can't speak to that.

It has not been very successful in the other projects I've worked on. Whether -- and I don't know what the drivers are on those, whether or not the EPA has yet to begin reviewing or whether or not the EPA is opening it back up to starting a new review process.

But it has yet to be resolved and finalized in a SIP.

MR. CASCIANO: So back to your visibility modeling, does the model take into effect other sources?

Is that --

MR. LUCAS: Not this modeling, no. The modeling done for San Juan was specific to San Juan, San

Juan's baseline and San Juan's future AQC technologies
that were being analyzed. It does not look at any other
sources in the area.

MR. CASCIANO: Okay. So you don't have any information on what percentage of the total air shed or, you know, sources in the area this source represents.

MR. LUCAS: No. It was not required as part of the BART -- BART submittal.

MR. FULFER: What are the state -- what are the surrounding states' presumptive levels? Are they the same as what we're looking at here, or --

MS. FISCHER: The presumptive levels are a function of the boiler type and the fuel. They're not by state. They're by the fuel you burn and the type of boiler you have. So they have the same list of presumptive levels that San Juan has, it's just a matter of looking at their boiler and fuel type to figure out what line to go on on the table. That table is in the EPA guidelines.

MS. ORTH: Other Board questions?

Mr. Alvidrez, do you have follow-up?

MR. ALVIDREZ: I do, just a -- one question.

Mr. Lucas, Board Member Casciano asked you a question about the modeling you did for San Juan Generating Station, whether it took into account other

sources, and I wanted to clarify on the record is there other modeling, such as the WRAP modeling that was done, that looks at a comprehensive -- comprehensive number of sources and their impacts?

MR. LUCAS: Yes. There is other modeling that has been done and will be done. NMED indicated earlier that the 2013 and 2018 will be revisited, and at that point, I believe, they will be including -- or a contractor will be including all the various BART source changes that will happen, along with any other state or federal implementation proceedings or proposals going in.

And from that, you will end up with a new determination at each of the Class I areas as to whether or not visibility is truly improving beyond what NMED stated earlier.

MR. CASCIANO: And does EPA specify what improvement needs to happen, or is it just that it needs to be improving?

MR. LUCAS: There is -- they have established a glide path for each of the Class I areas, and that glide path is basically denoted to achieve a natural visibility condition by 2064. So simplistically, you would take the -- take where you're at today, and on an access view quite high to where you're going to be in

the future, and that line would draw a glide path.

So every few years various circulators would go back and reevaluate where everybody's at, and you will either be above the line or below the line at that point with these implemented changes.

And technically, if you're above the line, you're going to be looking at additional changes throughout BART sources or possibly throughout other non-BART sources and other air emission sources within an area, in other words, to try to further the progress towards that natural visibility condition.

MR. CASCIANO: So is that comprehended in the analysis you did for this BART?

MR. LUCAS: No. We -- the analysis we did was a single point. It was looking at what visibility improvements you could achieve at the 16 Class I areas by looking at those control technologies that are feasible for San Juan. The analysis provided here in the Exhibit C focuses on the SNCR technology and those improvements that can be seen and achieved.

MR. CASCIANO: Okay.

MS. FISCHER: If it's okay, the one thing I'd like to clarify on that is we did a BART analysis for San Juan, and then the NMED takes that BART analysis and that modeling that we did and plugs it into their

broader model of the whole state. So that, you know,
we're feeding a piece to the bigger work that NMED does.

MS. ORTH: Is there anything else,

4 Mr. Alvidrez?

MR. ALVIDREZ: No.

Thank you very much.

MS. ORTH: Anything else?

MS. RYAN: I would like to make one comment, and it's not necessarily specific to these two witnesses, but just in general to all of the parties involved.

I'm very interested, and I'm sure other Board members are, too, in the -- the cost effectiveness of each of these different types of technologies, and our frustration in wanting to make a difference in our environment and improve the regional haze, and, also, torn with the huge economic impact to our state and our citizens.

So I know the parties have briefed and analyzed and -- if you could just keep that in the back of your mind, that that is what -- that is what I personally am wrestling with, is wanting to make a visible change and do something meaningful and worth everyone's time, and at the same time not wanting to burden our state with additional economic burdens in a

- 1 state that it currently is, which is under a lot of 2 burden.
- So I guess I just want the parties to keep
 that in mind as you continue to present testimony to our
 Board over the next couple of days and that you would
- 6 try to address that in some more detail for us.
- 7 MS. ORTH: All right.
- 8 Anything else?
- 9 Any reason not to excuse the witnesses?
- 10 No?
- 11 Thank you very much, Ms. Fischer and
- 12 Mr. Lucas.
- Mr. Alvidrez.
- 14 MR. ALVIDREZ: That concludes our -- our
- 15 | direct case.
- MS. ORTH: All right. Thank you.
- 17 Let's talk about where we are in 11-01.
- I see Mr. Rose's hand.
- MR. ROSE: If you can see me over
- 20 Mr. Schlenker-Goodrich. He's such a big guy, sort of.
- MS. ORTH: Yes.
- 22 Just one second --
- MR. ROSE: Sure.
- MS. ORTH: -- Mr. Rose.
- 25 Board, the other witnesses for whom notice of

- intent to present technical testimony was submitted,

 such that they will be in front of you, is -- as you've

 seen this morning, is from San Juan Coal Company,
- 4 represented by Mr. Roybal back there.
- He does have one of his witnesses with him,
 that's Mr. Cline. The other two witnesses are in
 Farmington area. He would like to present all three of
 his witnesses at the same time. And so he'd like to put
 on his whole presentation tomorrow when we're in
 Farmington.
- 11 That leaves Mr. Rose and
- Mr. Schlenker-Goodrich who are offering more something
 in the nature of public comment.
- But let's hear them out.

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- MR. ROSE: Madam Hearing Officer, we have no testimony. We submitted our written public comment yesterday.
 - But what I was going to do was note that you have a couple legislators here who want to speak and have an interim committee meeting starting at 1:00. And so they wanted to be able to speak before they go back into session, in the next 25 minutes.
- So I wanted to alert you to that fact.
- MS. ORTH: Thank you for that.
- MR. ROSE: So you can make accommodation for

them.

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2 Thank you.

MS. ORTH: All right. Thank you for that.

4 Mr. Schlenker-Goodrich, would you describe

5 | what your intention is?

MR. SCHLENKER-GOODRICH: Yeah. We'd like to simply summarize our written public comments that we submitted on Friday, May 27th. We think we could do that in less than five minutes. And I decided not to do public comment, but I apparently signed up on the wrong form. So I can do that in the afternoon, which is fine with me.

- MS. ORTH: All right. Thank you.
- Mr. Roybal.
- MR. ROYBAL: Madam Hearing Officer, we just have two witnesses, not three.
- 17 MS. ORTH: Oh, I'm sorry. Great.
- So legislators -- I'm sorry. It's hard to see out there.
- 20 Who would like to speak now, to make public 21 comment?
- Testimony is taken under oath and is subject to questions.
- 24 If you will please introduce yourself.
- MR. NEVILLE: My name is --

THE REPORTER: Would you raise your right hand, please.

STEVE NEVILLE

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT TESTIMONY

THE REPORTER: And would you please state and spell your name, please.

MR. NEVILLE: My name is Steve Neville,

N-E-V-I-L-E. I'm state senator for District 2, which
surrounds the San Juan Generating Station in

Northwestern New Mexico.

I live in -- I'm a resident of Farmington, New Mexico, and we're down here for a Water and Natural Resources Committee meeting. And I appreciate your taking the time to let me enter a few comments.

As you can imagine, the concerns of what happens with the environmental issues in San Juan County are very important to us. We have a large facility. I think most of you are aware that San Juan Generating Station is located up there.

San Juan Generating Station plus the coal miners that fuel that facility constitute nearly 1,000 jobs in our community. That is a tremendous economic driver for our local area. They also pay the state

millions of dollars in taxes every year, as well as contributing greatly to the local economy in terms of material supplies, those kind of things.

That's all the selfish reasons why I'm here.

But let's look at it from the State of New Mexico. And as a legislator, I certainly have to consider those issues, as well.

The State of New Mexico derives fully one-half of the generating capacity -- one-half the electricity from San Juan Generating Station. The rest of it they have to get from out of state or the nuclear plant at Palo Verde and so forth. That's a tremendous economic situation for the State of New Mexico.

Everyone knows that coal is the cheapest method in which to generate electricity. And San Juan Generating Station has made a gallant effort over the past few years to be very friendly to the environment and certainly to those of us who live here -- live there. We believe that San Juan Generating Station has done a tremendous job in protecting the environment, as well as helping the citizens of New Mexico prosper around the state.

I would urge that you adopt this plan that you're considering. The one that's proposed by EPA will greatly enhance -- increase the cost of electricity to

all the citizens of New Mexico. And while you look at it as a dollar per person amount, that amount when you take it over the whole state has a tremendous economic benefit.

With those comments, I'll stand for any questions or conclude my remarks, and I appreciate the opportunity to let me talk. Thank you.

MS. ORTH: Thank you, Senator.

Questions?

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11 Thank you very much.

12 PAUL BANDY

having been first duly sworn or affirmed, was
examined and testified as follows:

DIRECT TESTIMONY

THE REPORTER: Would you state and spell your full name, please.

MR. BANDY: I'm Paul Bandy, P-A-U-L B-A-N-D-Y.

I'm a state representative, District 3, which is Eastern

San Juan County.

I want to echo what Senator Neville said. I think they've done a lot of -- made a lot of investments to improve the emission -- to lower the emission rates for the San Juan Generating Station, and I think that -- the plan the state proposes that's before you I think is

a -- I think that the PNM thinks that they can live within that and still keep the utility rates at a reasonable rate -- level in New Mexico.

It's important for all the state to have a reasonable utility -- electrical rate, because everything that we do, everything we buy and all the jobs that we produce is dependent in one way or another on electrical supply, and that -- and supplying that at a reasonable rate.

My personal concern is from our neighbors, whose -- many of them work at the power plant or their jobs are associated with that. We've already -- we have two power plants in San Juan County. The San Juan Generating is on the north side of the San Juan River. The Four Corners Power Plant is on the south side and on the Navajo Reservation.

And they've already decided that because of the environmental regulations they're going to shut down three of the five plants -- three units that produce electricity there. So that's going to be a tremendous hit for jobs in our area. And we certainly don't need to threaten any more of the jobs.

The other is about the tax base in San Juan County. 93 percent of San Juan County is government land of one kind or another, either controlled by the

1 BLM or the State of New Mexico or the Navajo 2 Reservation. And so there's not much of a tax base 3 there if it's not for the industrial segment. And the San Juan Generating Station has a tremendous effect on 4 5 the county tax base. 6 That's would conclude my testimony. We'd urge 7 you to adopt the plan that's before you. 8 MS. ORTH: Thank you, Representative. Ouestions? 9 10 No? 11 Thank you very much. 12 MR. BANDY: Thank you. 13 RAY BEGAY 14 having been first duly sworn or affirmed, was examined and testified as follows: 15 DIRECT TESTIMONY 16 17 THE REPORTER: Would you state and spell your full name, please. 18 19 MR. BEGAY: Thank you. 20 My name is Ray Begay. I'm in the state House 21 of Representatives, serving my 13 years. And I'm here 22 to testify on behalf of my constituency and also on 23 behalf of District 4 in San Juan County. 24 I am a permanent resident of San Juan County

and has been for many, many, many years. I live in

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Shiprock. Also lived in Red Valley, Arizona, on the New Mexico side, near the border of Red Valley and Mitten Rock area. And my families comprise of a ranch -- being a rancher, farmer, and just -- just common people and professional people, as well.

And having said that, I was looking at the several indicators on this hearing being conducted today and some of the recommendations that are being made.

And there's always a negative and always a positive in such a hearing as this, and being able to look at all the pictures and all the numbers and seeing what would be the best practice here in the State of New Mexico as it is.

And the Public Service Company of New

Mexico -- obviously, the Navajo Nation or -- is a

stakeholder in this whole process. And many Native

American, predominantly Navajo, live off the reservation
in Farmington, Aztec, Bloomfield, La Plata and Kirtland,

Waterflow and those areas, and some of them had
established permanent residence because of the jobs
nearby.

Four Corners is very unique, and its coal, oil and gas, helium and other natural mineral product.

And I think for many, many years, the State of New Mexico had benefitted from the revenues that are

generated through time. And we have been very healthy here in the State of New Mexico, were able to gain many employment for people that otherwise would not have that opportunity to.

Also, the Navajo Nation government itself had also benefitted. And many of my relatives and friends and people that I communicate with at a professional level that are Navajos have really sustained themselves through this economic endeavors. And some had retired, working for the -- for PNM and BHP Billiton and other public service company, and live in a very comfortable lifestyle now and really appreciate the corporations coming and doing what they had to do.

And I live also in Shiprock, I live along the San Juan River, and I have a farm there. And so I see the pollutions that goes on 24/7, and it's been there for many, many years. And so there seem to be some question now who would be the caretaker of the environmental impact, would it be the federal government, would it be the State of New Mexico.

And I have some information on the San Juan Generating Station that employs 394 full-time workers, and 20 percent of those are of Native American descent, predominantly Navajos. The San Juan Mine also employ 526 people, of whom 46 percent are Native Americans.

And the plants itself pays millions of dollars
a year in government taxes, which I alluded to earlier.

And to kind of give you an accurate figure is

\$54.8 million in coal royalties and taxes paid to
governments and tribes, 6.4 million paid in property tax
to San Juan County.

And also, that San Juan also purchased about 30 million in materials and supplies every year and hold approximately 122 million contracts for outside services. The plant pays 280 million each year for coal and ash removal.

So the productivity, the economy that's generated in the Four Corners area is very beneficial to the Navajo Nation, to tribes and to the City of Farmington and to San Juan County in general.

I would urge this body to make that determinations that the environment -- the Environmental Improvement Board should adopt and draft a State Implementation Plan as proposed by the New Mexico Environmental Department. So I'm here to urge you as a body to make that determination. I think it's -- I think it's worthwhile that we keep all the decision-making here in the State of New Mexico.

I appreciate your time and attention to my request. Thank you.

1 MS. ORTH: Thank you, Representative Begay. 2 Are there other legislators? NATE GENTRY 3 having been first duly sworn or affirmed, was 4 examined and testified as follows: 5 6 DIRECT TESTIMONY 7 THE REPORTER: Would you state and spell your 8 full name, please. 9 MR. GENTRY: My name is Nate Gentry, 10 representative, House District 30, N-A-T-E G-E-N-T-R-Y. 11 THE REPORTER: Thank you. 12 MR. GENTRY: Thank you, Madam Chair, members 13 of the Board. My name is Nate Gentry. I represent House 14 15 District 30, located in Albuquerque. I'm here today to urge the Board to draft the 16 17 State Implementation Plan as proposed by the NMED. 18 As I'm sure the Board is aware, the federal 19 plan costs significantly more than does the state plan. 20 Not only is there concern certainly from my perspective, 21 the relative household impact that the proposed federal 22 plan would have, but there's also significant economic 23 concerns. 24 The federal -- proposed federal plan costs 25 roughly 10 times more than would the state plan, and

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    this would burden particularly the portion of the state
    that has been particularly -- particularly hard hit by
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    the recent economic downturn, specifically San Juan
    County.
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              What is also of concern -- or from my
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    perspective, the state plan has -- strikes a much better
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    balance between both the environmental consequences as
    well as the economic considerations.
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              So I would again urge that the Board to accept
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    the state's -- NMED's plan, State Implementation Plan.
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              With that, I'd stand for any questions.
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              MS. ORTH: Thank you very much.
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              Other legislators?
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              Other legislators?
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              No?
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              Board, are we ready for a lunch break now?
              MS. PEACOCK: Yes.
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              MS. ORTH:
                        Yes.
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              MS. PEACOCK: How much public comment is left,
    or how -- how much time is left?
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              MS. ORTH: I can -- how many are here to make
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    public comment in EIB 11-01, that's the regional haze
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    State Implementation Plan revisions?
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              One, two, three, four -- all right.
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              Is there anyone here specifically to offer
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    public comment in EIB 11-02, which is a related but not
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    identical matter?
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              Anyone at all?
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              Okay.
                             We should continue, then, and --
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              MS. PEACOCK:
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              MS. ORTH:
                         All right.
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              MS. PEACOCK: And then it's my understanding
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    we would go to Farmington.
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                         That's correct. Then we're done --
              MS. ORTH:
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              MS. PEACOCK:
                             We're done here and -- yeah.
    Let's finish up here.
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              THE REPORTER: Can we take like five minutes,
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    though, please?
              MS. PEACOCK: Cheryl, thank you. Absolutely.
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              MS. ORTH: Yes.
                                Thank you.
              Let's take five minutes.
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              (Proceedings in recess from 12:49 p.m. to
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              1:05 p.m.)
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              MS. ORTH: We are back after a break.
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              We have finished the technical testimony that
    will be heard in Santa Fe. We have a little more
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    technical testimony to hear tomorrow in Farmington from
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    San Juan Coal Company, but that will be up at the
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    college in Farmington starting at 9:00 a.m. tomorrow.
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              So what we're going to do for the rest of our
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1 time together today is accept the last of the public 2 comment. 3 What I have is Norma McCallan, Paul Gessing, 4 Beverlee McClure, Elizabeth Slota and Erik 5 Schlenker-Goodrich. 6 Is there anyone else who is going to want to 7 make public comment? I see no hands. 8 Let's begin with Ms. McCallan. 9 10 MS. MC CALLAN: Do I come up there? 11 MS. ORTH: Yeah. Come up here, please. 12 All comment is taken under oath and is subject 13 to questions from the Board. 14 And I'll ask you to keep your comments under 15 five minutes, if you can. NORMA MC CALLAN 16 having been first duly sworn or affirmed, was 17 examined and testified as follows: 18 DIRECT TESTIMONY 19 20 THE REPORTER: Would you state and spell your 21 full name, please. 22 MS. MC CALLAN: Norma McCallan, 23 M-C-capital-C-A-L-L-A-N. 24 I am a long-term resident of New Mexico.

deeply love it, and I feel very privileged to live in

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this state, having grown up in another state, back east.

I cherish its land, its water, its people, its
magnificent blue skies.

I support not your plan, but the EPA's proposed BART plan to reduce the NO_x emissions which will reduce them by 80 percent on the San Juan Generating Statement -- Generating Station. It is a very positive step, I think, in a very long history of pollution emanating from the Four Corners area.

You can see that brown -- you can even see the brown haze sometimes in Santa Fe. You can certainly -- it just gets deeper and deeper and thicker and thicker as you head toward Farmington, as I did several weeks ago.

And I think that your plan is woefully inadequate to do the job.

I went to the Environment Department's public hearing in May here in Santa Fe, and PNM was there, and they really emphasized the -- what they considered the extreme costs to their customers as being the reason that they were a -- preaching this separate smaller plan. And they pointed out that they have a lot of low-income customers in their area, which I certainly wouldn't deny at all.

New Mexico is a very low-income state. And so

it's almost at the bottom in the per capita income in
the country. And I just saw recently a figure that it's
one of four states where 20 percent of the people have
to live on food -- exist on food stamps. So that's not
an issue.

But I think they have a -- grossly exaggerated this 20 -- this \$80 a year increase that it would -- that people would see on their bills. I'm not an engineer, and I'm not a mathematician, but people who are have pointed out that they think the figures are really exaggerated and it would be more like a much more reasonable \$10 an actual year.

And we have to remember that the poor in New Mexico are -- also suffer disproportionately from the environmental effects of air and water pollution, and we know that there's a huge amount of asthma and lung-related diseases in the Four Corners area, far greater than anywhere in the rest of the state.

In fact, local residents often consider themselves to be a sacrifice zone, creating energy for the rest of the country through the oil and gas and the two large power plants.

Haze is smog, and smog is full of pollution. So it's not just a visibility issue. It's clearly a major health issue. And it seems to me that PNM is

thinking much more about its corporate profits than it is about the well-being of its customers.

But if you do want to look at the visibility, which is important in its own right, tourism is the second -- after the oil and gas industry, tourism is the second highest economic driver in New Mexico. And tourists don't like to see smoggy skies.

There are 16 what they call -- the EPA calls

Class I national parks, national monuments and

wilderness areas within a 100-mile radius of the Four

Corners plant, Bandelier, which is a hop, skip and a

jump from Santa Fe, being one of them. And if we want

to stay the land of enchantment, we had -- and keep our

clear -- clean, sparkling blue skies, that we have in -
still in a good part of the state, then we are to be

very seriously supporting EPA's BART plan.

The national parks bring in something like 18,000 jobs a year and thousands and thousands of tourists. So visibility is important in that respect.

And I just want to urge you -- I appreciate the Environment Department in New Mexico. They've done a lot of good things over time. Last year they did endorse the EPA plan, and now with new members, a new administration, they're coming up with their own.

But I would strongly urge you to support the

EPA's plan, which I think is very heavy thought out, it uses technology which is readily available everywhere, and it will be to long-term good of the state, not just the short-term good of corporate profits.

So thank you.

MS. ORTH: Thank you, Ms. McCallan.

Paul Gessing.

PAUL GESSING

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT TESTIMONY

THE REPORTER: Would you state and spell your full name, please.

MR. GESSING: Paul, G-E-S-S-I-N-G, Gessing.

THE REPORTER: Thank you.

MR. GESSING: I come here today representing New Mexico's only free market oriented think tank. We have an interest in this particular issue because we support energy policies that maximize personal responsibility and individual choice. We're here in support of the draft State Implementation Plan as proposed by the New Mexico Environmental Department.

While we do have quibbles and have concerns about the general process involving the Environmental Improvement Board, and that is a consistent thing from

the previous administration into the current

administration, our view is that state dictates are

better than federal dictates from Washington, DC. And

so we would rather have decision-making done here

locally rather than coming top-down from Washington.

New Mexico businesses have been hit hard by economic downturn. Energy costs are something that they have very little control over, and yet, as we've seen in recent years, energy costs, electricity costs in particular, have risen dramatically.

We have also studied the impact of New Mexico's renewable portfolio standard, a state-passed standard that we estimate will increase energy costs -- electricity costs to consumers by \$2.3 billion over the next 10 years.

So New Mexico is not sitting on its hands. We have many different policies in place that are designed to address very real environmental concerns. This particular state initiative would have significant salutary impacts on air quality and the quality of life of people living in and around the area affected by the Four Corners plant.

And so we do support this initiative and strongly urge the Environmental Improvement Board to adopt it.

1 Thank you very much.

MS. ORTH: Thank you, Mr. Gessing.

Beverlee McClure.

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BEVERLEE MC CLURE

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT TESTIMONY

THE REPORTER: Would you state and spell your full name, please.

MS. MC CLURE: Beverlee McClure,

11 B-E-V-E-R-L-E-E, McClure, M-C-capital-C-L-U-R-E.

12 THE REPORTER: Thank you.

MS. MC CLURE: Thank you.

Madam Chair, members of the committee, as I said, I'm Beverlee McClure. I'm the president of the Association of Commerce and Industry, and we serve as a statewide Chamber of Commerce.

In this capacity, we're the only association that represents all business, large and small and all geographic sectors in our state. And so I sit here today in front of you on behalf of the employers. I will tell you that PNM is a member of the Association of Commerce and Industry, as are many other employers that would be negatively impacted if we were to adopt the federal plan.

And I know the issue before you is hard, and you've heard lots of testimony. I think the thing to note is that PNM is not resisting addressing the problem, but more importantly, but how to address the problem, and how to do it in a way that helps the environment at the same time without continuing to hurt the economy and the employers in our state.

You probably know that the State of New Mexico is at an all time high with unemployment. Even though we saw a dip in that the last month, the explanation for that is an unfortunate one. Not because people went back to work, but because their benefits have expired and their jobs are not there. So we stand in a time when we have to look at the economic impact along with the environmental impact, and that's what I sit here and ask you to do today.

You know, because the state did not have an implementation plan that was adopted, through no fault of their own, PNM found that they were at the mercy of the federal EPA. The EPA came in and has recommended a technology that is pretty expensive, very expensive, \$750 million to \$1 billion.

So what PNM basically is asked and what the employers of the state is asked is is there a way to do this, where we don't have to increase the costs, because

the business is going to bear the brunt of that, because of the usage that we have with our employers in the state.

And so with that, the State Implementation

Plan took another look at this and said there is a way,

and there is a technology where we can address the issue

in the San Juan -- with the haze issue, but at the same

time be at a lower cost to PNM, which, in turn, will be

a lower cost for the employers in our state.

And so that's what we're asking for today, is to look at that State Implementation Plan. The EPA recommendation doesn't seem to be based on a study of the costs, the impact, even though by their own rules, part of the recommendations for any retrofit technology has to be based on costs and on economic impact, and it does not appear that happened.

So the State Implementation Plan is a chance for us to take another look at this, to look at how to work together to balance the environment with the economy. So on behalf of the employers and the state, I ask you to consider that and consider the ripple effect of that, because this is a time in our state when it's very important.

Thanks so much.

MS. ORTH: Thank you, Ms. McClure.

Elizabeth Slota?

MS. SLOTA: My name --

THE REPORTER: Would you raise your right

4 hand, first.

ELIZABETH SLOTA

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT TESTIMONY

THE REPORTER: And now, please, your name.

MS. SLOTA: Elizabeth Slota, S-L-O-T-A.

THE REPORTER: Thank you.

MS. SLOTA: I'm addressing you today as a member of the PNM Forerunners, a retirement group of former employees. I am a member of that association by association with my deceased husband. I am considered a surviving spouse. But I also want to address you as a citizen of New Mexico, about one month short of 43 years.

I also came to New Mexico not knowing what it was, where it was even. My husband, Michael, was in the service at the time, stationed at Kirtland. And fell in love with New Mexico within 24 hours, and have stayed since. And I've been asked by the Forerunners to do this, but as I said, I also want to address you as a citizen.

The EPA is a federal government entity, and the federal government tends to think in one size fits all. So their plan is probably the same plan that happens in Michigan, New Jersey, where I come from, and anyplace else.

I think that the state now has the opportunity to develop a plan that will be the best for New Mexico, not only in emissions controls and effectiveness on health issues, visibility impact, but the economic impact of this plan.

The state proposal cost to the residential customer is estimated at \$11.50 per year. The EPA program would be \$82 a year. And we all know that estimates tend to go up rather than down.

But more importantly, not only will the resident -- residential customer be played -- be paying more per year, but it will also affect the cost of businesses, the supermarket, doctors' offices, public buildings, and state parks for tourists.

And the way that the businesses will recoup their increased energy cost will be by higher prices in the supermarket, the doctors' office. The way the government, state buildings, state parks, et cetera, will recoup their increased cost is through increased taxes. I don't want either one of those. I'm sure no

one wants either one of those.

2 So I would like you to consider the proposed 3 state plan.

And also, the emissions controls are being met at the standards or even at a higher level. And, you know, it's kind of like a no-brainer. If you can do the job at a lower cost, why do it at a higher one?

Thank you for your time and your consideration.

MS. ORTH: Thank you, Ms. Slota.

Mr. Schlenker-Goodrich.

ERIK SCHLENKER-GOODRICH

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT TESTIMONY

MR. SCHLENKER-GOODRICH: As an initial matter, I want to note for the record that I'm -- yesterday we submitted an additional letter to the Board that complements our Friday, May 27th letter, and I have copies of that which I'll provide to the Board.

Basically there was an error in our citation, so we corrected that with yesterday's filing.

But today in terms of public comment, I want

perspective at the Western Environmental Law Center, as

to make four basic points that summarizes our

well as the perspective of several environmental groups.

And I'll just list them very quickly. That would be

Dine Care, the Navajo, the Natural Resources Defense

Council, New Energy Economy, New Mexico Sportsmen, the

Rio Grande Chapter of the Sierra Club, the Sierra Club,

And the first point I want to make is that with visibility protections under the Clean Air Act we're really talking about, in my view, two things.

San Juans Citizens Alliance and WildEarth Guardians.

Number one, protection of the iconic
landscapes, both in New Mexico and the broader Four
Corners region, my home area up in Northern New Mexico
and Taos. That means places like Wheeler Peak
Wilderness or the Cruces Basin Wilderness or the Latir
Peak Wilderness. And these iconic landscapes are very
essential to both our culture and also our economy.

The second component of visibility protection is really the public health benefits. Now, these are indirect, because the purpose of visibility protections is really protection of visibility. But there are very significant indirect public health benefits from increased, intensified regional haze protections.

And these can be quantified. And when you're talking about visibility protections, what we're really talking about is trying to internalize the costs of

- 1 pollution, and here specifically of nitrogen oxides.
- 2 | Someone at some point is going to bear the costs,
- 3 | whether that's a ratepayer in terms of increased
- 4 | electricity costs or a child getting asthma. At some
- 5 point, someone has to pay.
- 6 Sometimes those costs aren't internalized.
- 7 | Sometimes they're not even recognized. And so that's
- 8 | what we're talking about here, is trying to internalize
- 9 the costs of haze causing pollution emitted from the San
- 10 | Juan Generating Station.
- And we can quantify those impacts. We can
- 12 also do qualitative analysis of those impacts.
- From a quantitative perspective, EPA has
- 14 estimated that the benefits of regional haze protections
- 15 | would amount to around \$8.4 to \$9.8 billion a year,
- 16 | that's annual benefits, while the costs of regional haze
- 17 | protections are far less, at around 1.4 to \$1.5 billion.
- 18 | Those are the capital costs of implementing, investing
- 19 | in these pollution control technologies.
- And, now, we also can't put aside the ethics
- 21 | and morals. That -- those benefits also reflect the
- 22 | fact that we're preventing 1,600 premature deaths each
- 23 | year, and also preventing 1 million lost work and school
- 24 days. Those are things that have concrete economic
- 25 | benefits, but also very personal, moral, ethical impacts

to families here in New Mexico and the broader region.

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Now, the real debate here in terms of

technological issues is between the Department's

proposal for SNCR technology, selective noncatalytic

reduction technology, versus selective catalytic

reduction technology, as proposed by the EPA in its

proposed Federal Implementation Plan.

Now, we believe very strongly that the SCR technology is mandated and acquired under the Clean Air Act and that ultimately EPA is going to make a determination of whatever this Board decides whether the State Implementation Plan is sufficient, or if this Board decides not to approve the State Implementation Plan, EPA will then put forth its own Federal Implementation Plan.

Now, in terms of the concrete benefits of SCR technology versus SNCR, EPA's determined that SCR is more protective. It prevents about 77 to 90 percent of nitrogen oxide emissions from San Juan Generating Station, while SNCR only reduces around 23 to 25 percent of the nitrogen oxides. This is pretty significant. It's a difference of 17,500 tons of nitrogen oxides per year under SCR versus 4,900 pounds of NO_x per year under SNCR.

From a cost perspective, SCR technology is

also far more cost effective ton for ton. When you use

SCR technology, you're talking about less than \$2,000

per ton of reduced nitrogen oxides. SNCR is far less

efficient and actually costs around \$3,700 per ton of

reducing nitrogen oxide of pollution.

So from our perspective, the SCR technology is far more protective and also far more cost effective than SNCR technology. So it reflects good science, it reflects good policy, and fundamentally it represents the public interest.

Now, going into my final point here, the Environment Department's proposal isn't good science, and it isn't good policy, and it isn't in the public interest, and there are three primary -- or four primary problems with the SNCR proposal.

The first of those problems is that it fixates on ratepayer impacts. Now, ratepayer impacts are certainly important and a worthy consideration for determining what kind of pollution control reduction technology you want to consider. But you can't put aside all of those indirect benefits to public health that can be quantified and at least qualitatively analyzed.

But under cross-examination, the Department has admitted, as well as PNM has admitted that they

didn't actually consider the cost of public health or, frankly, the environment. Instead they made a decision that was fixated again exclusively on ratepayer impacts.

And to emphasize, I'm not dismissing those impacts. I'm simply saying those are one factor and there are other factors in terms of costs and benefits of one technology versus another technology.

So fundamentally we think that the SNCR proposal as put forth by the Department and supported by PNM Resources and others elevates the concerns of ratepayer impacts over visibility protections, cost effectiveness and public health. And we think one of the reasons that they've done this is that there's far too cozy a relationship between PNM Resources and the Environment Department.

In our comments that we submitted on May 27th, we noted that EPA and PNM Resources had met the pressure of EPA to adopt a more reduced SNCR proposal or to at least consider the state's proposal.

And in fact, they're apparently having conversations with the Attorney General's Office, where the Attorney General's Office has agreed to litigate what they view as, quote, unquote, a flawed EPA proposal, which suggests to us that they've made a premature decision to challenge whatever it is that EPA

decides to do.

And finally, we think that even if that was not the case, that there was some sort of political influence at play here -- we think that the State Implementation Plan as proposed by the Environment Department is on very shaky ground on a technical level and conflicts with various findings that EPA has already made in its proposed Federal Implementation Plan.

New Mexico resources to put forth a plan that ultimately will be rejected by the Environmental Protection Agency. And EPA here, as much as there has been comments that they are trying to impose a federal mandate here on New Mexico, are only doing so as a measure of last resort, because the State of New Mexico, frankly, has failed in its obligations to submit an acceptable State Implementation Plan.

So the problem here isn't EPA. EPA is simply doing its job and, quite frankly, is simply trying to represent the broader public interests in terms of visibility protections.

EPA is not alone in recommending SCR technology. The State of Colorado has submitted comments supporting SCR technology. The National Park Service has, the Fish & Wildlife Service has, as well as

an expert that we contracted to provide comments to EPA,

Dr. Sahu, which we provided in our May 27th comments.

So we would recommend that this Board reject the Department's proposal and join in those other federal entities in supporting either SCR technology or -- I think what the easiest thing to do here would be to support EPA's Federal Implementation Plan.

Thank you.

MS. ORTH: Thank you, Mr. Schlenker-Goodrich.

10 EXAMINATION

11 BY THE BOARD:

MS. RYAN: I have a question.

Yeah. I'm -- our role here is to evaluate the scientific evidence put in front of us, whether that makes the improvements to the environment that we're supposed to, and also balance that against other interests of the public, including the health, welfare of this -- the citizens of New Mexico.

And you've stated several times that several other factors can be quantified.

And I'm just wondering, playing devil's advocate here, why haven't they been quantified? Why does all of the number of environmental groups that you represent, which is quite a number of them, gotten together and -- and put forth some scientific evidence

for us to consider?

Because right now, there is none in front of us. We have an opinion from -- an opinion from you, a public comment, and that's all that we have. And I don't have -- I don't have witnesses, I don't have data, exhibits to consider on anything that you're saying.

And -- and as much as I want to be able to consider that, that is not in front of me.

All that I have from you is a public comment.

So I -- that will be going into my personal decision-making, is that I don't -- we're here to -- I want to look at -- sensically look at all the evidence in front of me, and I don't have technical testimony or anything like that from your organizations.

So, I guess, why?

MR. SCHLENKER-GOODRICH: I actually would respectfully disagree with you, Madam Board Member. I think in terms of technical evidence, you don't have to go very far. I think you can look at EPA's Federal Register notice dated January 5th, 2011, which goes into detail in support of the selective catalytic reduction technology.

I'd also point to you in the direction of the testimony of Dr. Sahu, and that's contained in Exhibit A, which we attached to our May 27th comments. And it's

a little confusing here, but it's Exhibit -- it's Exhibit 3, which is attached -- is part of Exhibit A.

And that's a technical analysis done by somebody who has, frankly, far more technical expertise than I do, and I wouldn't wager to wade into that technical debate. But Dr. Sahu provides a very convincing case of why SCR technology is valuable in this instance. In fact, he critiques EPA's proposal and says that EPA's proposal is far too lenient.

So in terms of technical evidence, I don't think you have to go any farther than the EPA Federal Register notice, as well as Dr. Sahu's testimony.

MR. ALVIDREZ: Madam Hearing Examiner, I was going to make a clarifying statement or -- in terms of a discussion I had with Mr. Schlenker-Goodrich about the status of the filings that have been made on behalf of his clients.

And my understanding is they are purely public comment, that they are not testimony upon which this Board can rely from a technical and evidentiary standpoint in order to make a determination. If they are, in fact, being offered as evidence, which is — technical evidence and expert evidence, then I'm going to have to object and also request that they be stricken on several grounds.

Of course, the materials were submitted untimely pursuant to both the prehearing order in this case, as well as in accordance with the Board's own regulations and rules with respect to rulemaking, which says if you don't submit your testimony by the deadline, it will not be admitted.

Of course, we have not had an opportunity to cross-examine or -- anyone from EPA or Dr. Sahu or anyone else, so it's difficult to respond to what's been filed.

So I think it's entirely improper for -- at this juncture to try and bootstrap this commentary into some type of testimony this Board can rely on on a legal basis to make a ruling.

So I request that either those comments be stricken from the record or, alternatively, that it be clear on the record that they are nothing more than public comment and opinion and not -- not evidence in this case.

MS. ORTH: All right.

Just to respond before I invite the other counsel, it's true that the rules and the procedural order state that technical testimony not coming in by the deadline set there will not be admitted, but public comment did not have that same deadline.

Mr. Schlenker-Goodrich and everyone else who made public comment today and will make it tomorrow is entitled to offer that comment, which will be admitted.

So yes, I agree with you, it can't be technical testimony, and yet I think you went a little too far when you said it can't be evidence that the Board can rely on, because -- correct me if I'm wrong, Mr. Vigil -- I believe this Board relies on technical testimony and public comment and the other evidence in front of it. It's still evidence, but you're right that it's not technical evidence in reaching its decision.

MR. VIGIL: Well, Madam Hearing Officer, I agree that the Board does rely on both public comment and technical testimony.

I think the distinction, though, is that what Mr. Alvidrez is referring to is that the attachment of Dr. Sahu, which may have been technical in nature and was filed improperly, and I think that's what -- if I'm understanding correctly, the objection, that is what he's asking to be stricken -- you know, Mr. Goodrich is allowed to make public comment here, as you correctly note, but I think the real -- I guess the heart of the -- the dispute here is the technical nature of something that came in ostensibly under public comment.

MS. ORTH: All right. And I was getting to

that.

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2 MR. VIGIL: Okay.

MS. ORTH: Sorry. I was making my more basic

4 point first.

So now on the question of whether

Dr. Sahu's -- excuse me -- report should be included,

7 I'll ask all of the lawyers for their opinion.

First, you, Mr. Schlenker-Goodrich.

MR. SCHLENKER-GOODRICH: Well, let me state first in terms of the objection to the public comment letter, you know, provisions are provided for exhibits.

On terms of Dr. Sahu's exhibit specifically, this was provided to EPA.

And I would agree with counsel for PNM
Resources to the extent that with public comment,
because it is not subject to the same level of
cross-examination, you do have some discretion to give
it lesser weight than other technical evidence. That is
certainly within your purview.

I think with Dr. Sahu's testimony, which has already been submitted to EPA, the Board may be on some shaky ground to ignore evidence that EPA has that it may rely on in rejecting the State Implementation Plan.

So I would suggest that you consider it and, obviously, give it the weight that you think it

deserves. I have absolutely no problem with that given that we're providing public comment, which is of a less technical nature than providing technical testimony through a notice of intent. So I have no problem on that.

But I do think it should be considered. I do think it's part of the record. I simply think you should give it the weight that you think it deserves.

MS. ORTH: Mr. Grantham, do you have anything to add?

MR. GRANTHAM: Yeah.

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Madam Hearing Officer, the Department shares the concerns that counsel for PNM raised in particular with regard to Dr. Sahu's testimony. Technical testimony as defined under 20.1.1 means scientific, engineering, economic or other specialized testimony, but does not include legal argument, general comments or statements of policy or position.

So to the extent that counsel -- the conservation groups offer technical testimony, in a submission that was submitted well after the deadline for the notice of intent, I'm not sure how the Board can give that more or less weight. It's either in or it's out.

And our position would be that the -- of

course, the public comments should be accepted into the record and given the weight that the Board deems appropriate, but that should not include the comments of Dr. Sahu. And whether or not EPA views that as relevant in assessing our BART determination isn't really a factor, because we have to look to the procedural guidelines for this -- to the governing laws for this

9 MS. ORTH: All right. Thank you,

10 Mr. Grantham.

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11 Mr. Rose?

proceeding, not EPA's.

12 Oh.

MR. ROSE: I'm hiding.

Madam Hearing Officer, we would join in the comments from NMED's counsel and from PNM's counsel, but I would note that the reason why the Board has a dichotomy between public and technical testimony is, one, to alert those who are going to participate in the hearings ahead of time that there will be technical testimony that they could provide responsive testimony to and that the purpose for providing those in a notice of intent and providing live testimony is to allow for cross-examination of that testimony.

And with Dr. Sahu's testimony, we're not provide -- being given the ability to cross-examine and

question any of the assertions that he raises in his testimony.

And for that reason, I think that the Board's rules don't allow for that kind of testimony to be treated as public, because I don't believe the Board can really differentiate between give -- just on the weight to give it as to -- as to how much importance it's given.

I think the Board's already made that decision when it decided its rules, and that testimony should have been provided in person and subject to cross-examination. And although Dr. Sahu did testify in front of this Board sometime last summer, if you will recall, on the greenhouse gas rules, so it's not as though the Board isn't familiar with him.

But I think that's the proper way to do this and prevent -- or present his opinions and allow them to be cross-examined and, therefore, the Board be given the benefit of that.

MS. ORTH: All right.

Mr. Roybal, do you have anything to add?

MR. ROYBAL: No, Madam Hearing Officer. I would support the comments made by Mr. Rose and

24 Mr. Alvidrez and Department counsel.

MS. ORTH: All right. Thank you.

MR. SCHLENKER-GOODRICH: Madam Hearing

Officer, if I could make one -- I think there's one

important distinction here that has not been considered,

and that is Dr. Sahu did not provide testimony

specifically regarding the State Implementation Plan,

rather these were comments submitted to the

Environmental Protection Agency.

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So I don't think it's necessarily the type of technical testimony that this Board prohibits via public comment, rather this was something submitted already to EPA, that is in front of EPA, and merits consideration by this Board because it is going to be a factor at some level, who knows what weight they will give it, but will be a factor in EPA's consideration of both its Federal Implementation Plan and the state's approval.

But it's not specific to the state implementation process. So I'm not sure it falls under the definition of technical testimony that will be prohibited via public comment.

MS. ORTH: Our general standard for what constitutes technical testimony is testimony that to be competent would require something more than a high school degree. And I -- my impression is that Dr. Sahu's testimony would meet that criteria.

So, Board, if this were a hearing in which I

were making a recommendation, for example, to my cabinet secretary, I would recommend that the cabinet secretary not rely on that testimony for the reasons that have been given, it's surprising, it's contrary to your rules and the procedural order that I entered back in March, and Dr. Sahu is not here in this hearing to be cross-examined.

For all of those reasons, my recommendation would be for you not to rely on it.

Mr. Vigil may have more advice for you.

MR. VIGIL: Madam Hearing Officer, I believe your recommendation is sound.

I would also point out that the hearing rules, especially Section 304, which governs participation by the general public, says that public comment is nontechnical testimony, and from what we've learned here, it looks that Dr. Sahu, who does have a PhD and, as Mr. Rose noted, did provide some very high level, technical testimony last year in some of the hearings, would definitely qualify as technical testimony.

MS. ORTH: Okay.

So, Board, what I don't want to lose here, then -- Mr. Schlenker-Goodrich, then the ruling will be that the testimony is excluded.

I don't want to lose here, though, as part of

that ruling all of what Mr. Schlenker-Goodrich has said or everything that was submitted on behalf of the conservation groups. You've heard his other points, and that, as far as I'm concerned, remains part of what you can base your decision on.

All right. Is there anything else,

7 Mr. Schlenker-Goodrich?

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MR. SCHLENKER-GOODRICH: No. I'm done.

MS. ORTH: All right. I think --

MR. FULFER: I have one question.

MS. ORTH: I'm sorry.

Mr. Fulfer.

MR. FULFER: I have one question.

In talking about public health benefits, electricity drives the economy, it drives our modern life. It's the thing that's lifted us out of the woodburning cooking era days and woodburning heating days and kind of brought us into a pollution-free environment, unlike our neighbor to the south, in Mexico.

So looking at the state, and being a poor state at that, and the economy being in bad shape, in your opinion, is it in our benefit and balance to all to have a plant that provides a positive economic impact and improving environmental impacts?

MR. SCHLENKER-GOODRICH: Well, I think, as I
mentioned, that at some point the costs are borne by
people, whether that's in terms of an increase in the
ratepayer, how much a ratepayer pays to PNM Resources or
whether a child ends up having asthma and then has
increased health costs.

I certainly have no problem with electricity.

I love electricity. I power computers, iPods, my home with it.

I think what all my client groups would suggest is that the best way forward in terms of energy is towards a transition to energy efficiency and to clean energy technology, and that is far better both from an electricity-producing perspective, from an economic perspective and from a public health perspective.

MR. FULFER: Okay.

MS. ORTH: Other Board questions?

No?

All right. Thank you very much.

MR. SCHLENKER-GOODRICH: Thank you, Madam Chair, Board members, Madam Hearing Officer.

MS. ORTH: All right. If there's nothing else, we will recess and reconvene tomorrow morning in Farmington at 9:00 a.m. at the college.

Anything else at all? MS. PEACOCK: I'd like to thank everybody who provided testimony today and public comment. We really appreciate it. And this is very interesting for us. MS. ORTH: Thank you very much. MS. PEACOCK: And we appreciate the written materials, very well prepared. (Proceedings adjourned at 1:47 p.m.)

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    STATE OF NEW MEXICO
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    COUNTY OF BERNALILLO
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         I, CHERYL ARREGUIN, the officer before whom the
7
    foregoing proceeding was taken, do hereby certify that
8
    the witnesses whose testimony appears in the foregoing
    transcript were duly sworn or affirmed; that I
9
10
    personally recorded the testimony by machine shorthand;
11
    that said transcript is a true record of the testimony
12
    given by said witnesses; that I am neither attorney nor
13
    counsel for, nor related to or employed by any of the
    parties to the action in which this proceeding is taken,
14
15
    and that I am not a relative or employee of any attorney
    or counsel employed by the parties hereto or financially
16
    interested in the action.
17
18
19
                               NOTARY PUBLIC
20
                               CCR License Number: 21
                               Expires: 12/31/2011
21
22
    My Commission Expires:
                             12/12/11
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